

## Jeffrey G. Gray, Ph.D.

Professor (Full)  
University of Alabama  
Department of Computer Science  
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Tuscaloosa, AL 35487-0290  
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### Education

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#### VANDERBILT UNIVERSITY

Nashville, TN

*Ph.D. in Computer Science* (GPA: 3.96)

Major Field of Study: Software Engineering

May 2002

Thesis: *Aspect-Oriented Domain-Specific Modeling: A Generative Approach Using a Metaweaver Framework*

Committee: Dr. Stephen Schach (advisor), Dr. Janos Sztipanovits, Dr. Gábor Karsai, Dr. Larry Dowdy, Dr. Mike Fitzpatrick, Dr. Fritz Barnes

#### WEST VIRGINIA UNIVERSITY

Morgantown, WV

*Master of Science in Computer Science* (GPA: 3.75)

Thesis: *The Role of Reuse in Introducing Software Engineering Principles in a Computer Science Second Course*

Summer 1993

Committee: Dr. Murali Sitaraman (advisor), Dr. Frances Van Scoy and Dr. Doug Harms

#### WEST VIRGINIA UNIVERSITY

Morgantown, WV

*Bachelor of Science in Computer Science (Honors Program)*

Final Undergraduate GPA: 3.86 (*summa cum laude*)

Summer 1991

#### THE LINSLEY SCHOOL (since 1814)

Wheeling, WV

*High School Diploma*

June 1988

### Academic Positions

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June 2021 -  
present

**UNIVERSITY OF ALABAMA**  
Director, Randall Research Scholars

**Randall Research Scholars  
(Honors College)**

Tuscaloosa, AL

August  
2014-  
present

**UNIVERSITY OF ALABAMA**  
Professor (Full)

**Dept. of Computer Science**  
Tuscaloosa, AL

January  
2010-July  
2014

**UNIVERSITY OF ALABAMA**  
Associate Professor

**Dept. of Computer Science**  
Tuscaloosa, AL

October  
2007-  
December  
2009

**UNIVERSITY OF ALABAMA AT BIRMINGHAM**  
Associate Professor (early tenure)

**CIS Department**  
Birmingham, AL

August  
2002-  
September  
2007

**UNIVERSITY OF ALABAMA AT BIRMINGHAM**  
Assistant Professor

**CIS Department**  
Birmingham, AL

## Funding

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### *Awarded Grants*

#### **NSF ITEST**

Title: *Scaling a Peer-learning Community Model to Provide AP CS Preparation and Career Awareness for Black Young Women*

Amount: As PI \$1,144,344 (of total \$3,480,644)      Period: 4/1/24 through 3/31/28

Role: PI at UA (with 6 other universities; UA lead submitting institution)

#### **NSF CSforAll**

Title: *Expanding a Statewide Pathway for CS Teacher Certification: A Curriculum Model for Secondary Education Teacher Candidates*

Amount: \$978,930.00      Period: 10/1/21 through 9/31/24

Role: PI (with Jeremy Zelkowski and Rebecca Odom-Bartel)

#### **NSF IUSE**

Title: *A Data-Driven Employer-Academia Partnership for Continual Computing Curricular Change*

Amount: \$1,188,256      Period: 5/25/21 through 5/31/24

Role: Co-PI at UA with minor role (with Allen Parrish, Susan Vrbsky, Randy Smith, and Monica Anderson)

#### **US Department of Education**

Title: *Pathways for Alabama Computer Science (PACS)*

Amount: \$3,969,916      Period: 10/1/20 through 7/31/25

Role: PI at UA (with Jeremy Zelkowski; Alabama State Department of Education as prime)

#### **NSF ITEST**

Title: *Peer-learning communities to develop rural, African American girls' computer science knowledge and career awareness*

Amount: \$1,180,644      Period: 9/1/18 through 8/31/22

Role: PI at UA (with Mohammed Qazi (PI) at Tuskegee University and Martha Escobar at Oakland University)

#### **NSF INCLUDES**

Title: *The Alabama Alliance for an Inclusive Middle Grades Computer Science Preparation through Makerspaces in the Alabama Black Belt Region*

Amount: \$299,998      Period: 9/1/17 through 8/31/21

Role: co-PI (Shaik Jeelani (PI) at Tuskegee University)

#### **NSF CSforAll**

Title: *Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers*

Amount: \$299,903.00      Period: 10/1/17 through 9/31/21

Role: PI (with Jeremy Zelkowski and Rebecca Odom-Bartel)

#### **NSF STEM+C**

Title: *CS 10K: The Tuskegee Partnership to Establish Computer Science Education in the Alabama Black Belt*

Amount: \$1,199,760.00      Period: 8/1/16 through 7/31/21

Role: PI at UA (with Mohammed Qazi (PI) at Tuskegee University and Melody Russell at Auburn University)

**Google CS4HS**

Title: *A CS Principles Community of Practice*

Amount: \$27,110.00 Period: 6/1/16 through 5/30/17

Role: PI (sole investigator)

**Google CS4HS**

Title: *A MOOC for CS Principles*

Amount: \$21,800.00 Period: 6/1/15 through 5/30/16

Role: PI (sole investigator)

**NSF STEM-C**

Title: *CS10K: Infusing Cooperative Learning into Computer Science Principles Courses to Promote Engagement and Diversity*

Amount: \$854,484.00 Period: 10/1/14 through 12/31/18

Role: PI (with Owen Astrachan of Duke Univ. and Fran Trees of Rutgers Univ.)

**Google CS4HS**

Title: *A MOOC for CS Principles*

Amount: \$24,000.00 Period: 6/1/14 through 5/30/15

Role: PI (sole investigator)

**UA Academic Affairs STEM Seed Funding**

Title: *Computer Science Principles in Tuscaloosa*

Amount: \$5,000.00 Period: 6/1/14 through 5/31/15

Role: PI (sole investigator)

**College Board**

Title: *Computer Science AP Pilot Phase 2*

Amount: \$7,500 Period: 9/1/13 through 7/31/16

Role: PI (sole investigator)

**NSF MRI**

Title: *Development of Instrument on Robot-aided, Cognitive Virtual Rehabilitation for Automatic Physical Training of Individuals with Disabilities*

Amount: \$500,000 Period: 9/1/13 through 8/30/18

Role: co-PI (with Fei Hu as PI; other co-PIs are Jaber Abu Qahouq, David Brown, and Daria Tsoupikova)

**UA Academic Affairs STEM Seed Funding**

Title: *Computer Science Across West Alabama (CSAWA)*

Amount: \$5,000.00 Period: 6/1/13 through 5/31/14

Role: PI (sole investigator)

**Google CS4HS**

Title: *Introducing CS Principles to STEM Teachers*

Amount: \$12,500.00 Period: 5/1/13 through 6/31/14

Role: PI (sole investigator)

**NSF CE21**

Title: *CS 10K: A Model for Statewide Deployment of CS Principles Courses*

Amount: \$1,011,133.00 Period: 1/1/13 through 12/31/16

Role: PI (with Mary Boehm of A+ College Ready as co-PI)

*REU Supplement:* The above amount includes an additional \$32,000 that was awarded as an REU supplement over the first two years of the project.

**College Board**

Title: *Computer Science AP Pilot III*

Amount: \$6,000.00 Period: 8/1/12 through 7/31/13

Role: PI (sole investigator)

**NSF SHF**

Title: *MODELS Conference Participant Funding*

Amount: \$15,000.00 Period: 5/8/12 through 4/30/13

Role: co-PI (with Geri Georg and Robert France, Colorado State University)

**United States Air Force AFRL-STTR**

Title: *Model-Based Parallel Application Development Environment (MPADE)*

Amount: \$39,974.00 Period: 4/1/12 through 3/31/13

Role: PI (with Nanbor Wang of TechX)

**Google CS4HS**

Title: *Bootstrapping CS Principles Courses throughout the Southeast*

Amount: \$15,000.00 Period: 5/1/12 through 6/31/13

Role: PI (sole investigator)

**Computer Science Collaboration Project – Disabilities Mini-Grant**

Title: *Computer Science Fun Day*

Amount: \$998.00 Period: 3/5/11 through 10/31/12

Role: PI (with co-PIs Daniela Marghitu of Auburn and Gary Edwards of United Cerebral Palsy)

**NSF IIS**

Title: *Programming by Voice: Extending Initial Programming Environments for Children with Disabilities*

Amount: \$331,524.00 Period: 9/1/11 through 8/31/14

Role: PI (Sandra Nichols from UA Special Education as co-PI)

*REU Supplement:* The above amount includes an additional \$16,000 that was awarded as an REU supplement in June 2013.

**ACM SIGCSE Special Projects Mini-Grant**

Title: *Robotics Training for Rural and Urban Middle School Teachers*

Amount: \$2,500.00 Period: 9/1/11 through 5/31/12

Role: PI (sole investigator)

**College Board**

Title: *Computer Science AP Pilot II*

Amount: \$20,000.00 Period: 6/1/11 through 5/30/12

Role: PI (sole investigator)

**Google CS4HS**

Title: *Integrating App Inventor Across K-12 Activities*

Amount: \$15,000.00 Period: 3/15/11 through 3/14/12

Role: PI (sole investigator)

**NSF RAPID**

Title: *Cloud Environmental Analysis and Relief*

Amount: \$65,013.00 Period: 8/15/10 through 7/31/13

Role: PI (sole investigator)

**US Department of Education GAANN**

Title: *Doctoral Fellowships in Computer Science: Next-Generation Science and Practice of Software Engineering*

Amount: \$656,325.00    Period: 8/16/10 through 8/15/13

Role: co-PI (with Nick Kraft and Susan Vrbsky as PIs)

**UA Research Stimulation Program**

Title: *Post-Doc Support for Software Engineering Research*

Amount: \$70,000.00    Period: 6/1/10 through 5/31/12

Role: co-PI (with Jeff Carver, Randy, Smith, Nick Kraft, and Eugene Syriani)

**NSF OISE**

Title: *US-Slovenia Workshop: Formalization of Modeling Languages*

Amount: \$24,750.00    Period: 6/01/10 through 7/31/10

Role: co-PI (with Barrett Bryant as PI)

**NSF BPC**

Title: *BPC-DP: A Multi-tiered Mentoring Model (M3) for Increasing Minority and Women Participation in Computing*

Amount: \$499,707.00    Period: 4/01/10 through 3/31/13

Role: PI at UA (original PI, but transferred PI status to Mike Wyss at UAB after joining UA)

**Google Research Award**

Title: *Improving the Education and Career Opportunities of the Physically Disabled through Speech-Aware Development Environments*

Amount: \$48,500    Period: 12/01/09 through 11/30/10

Role: PI (sole investigator)

**NSF Discovery Research K-12**

Title: *Integrating Computing Across the Curriculum (ICAC): Incorporating Technology into STEM Education Using XO Laptops*

Amount: \$2,809,612    Period: 8/01/09 through 7/31/14

Role: Co-PI (with Shelia Cotten as PI)

**NSF ITEST**

Title: *UAB-Birmingham Consortium for Advanced Education in Computer Science*

Amount: \$1,080,000    Period: 1/01/08 through 12/31/10

Role: Co-PI (with Mike Wyss-PI; John Mayer as co-PI)

**NSF CPA**

Title: *A Transformational Approach to Clone Refactoring*

Amount: \$239,953    Period: 8/15/07 through 8/14/11

Role: PI (sole investigator)

**NSF CAREER**

Title: *Foundational Principles to Support Evolution in Domain-Specific Modeling*

Amount: \$400,000    Period: 4/15/07 through 4/14/13

Role: PI (sole investigator)

**NSF**

Title: *A Model-Driven Performance Analysis Framework for Distributed, Performance-Sensitive Software Systems*

Amount: \$377,000 (UAB portion is \$200,000)    Period: 9/1/05 through 8/31/07

Role: PI at UAB (with Swapna Gokhale – UConn, Aniruddha Gokhale - Vanderbilt)

**IBM Eclipse Innovation Grant**Title: *Grammar-Driven Domain-Specific Language Tools*

Amount: \$15,000      Period: 3/1/05 through 2/28/06

**DARPA PCES 2 (In collaboration with Vanderbilt University)**Title: *Modeling and Generative Tools for Distributed Real-time and Embedded Systems*

Amount: \$1,177,373 (UAB portion is \$207,933)      Period: 4/03 through 3/05

Role: PI at UAB (Aniruddha Gokhale is primary PI from Vanderbilt)

**UAB Faculty Development Grant**Title: *Opportunities for New Lines of Research and Community Outreach within the Software Composition and Modeling Laboratory*

Amount: \$9,846      Period: 9/04 through 8/05

**CRA/CREW: CRA Collaborative Research Environment for Women**Title: *Model-Driven Synthesis of Embedded Robot Navigation Systems*

Amount: \$2,200      Period: 9/03 through 5/04

Role: Honors research advisor to Bina Shah and Rachael Dennison

**Mervyn H. Sterne Library Grant**Title: *Applying Software Engineering to a Series of Special Topics CIS Courses*

Amount: \$2,000      Awarded: April 2003

**DARPA PCES (Subcontract from Vanderbilt University)**Title: *Constraint-Specification Aspect Weaver (C-SAW)*

Amount: \$51,009      Period: 12/02 through 5/03

Role: PI at UAB (Ted Bapty primary PI from Vanderbilt)

**DARPA PCES**Title: *Constraint-based Embedded Systems*

Amount: \$1,249,590      Period: 6/00 through 6/04

Role: As a graduate student, I assisted in writing the DARPA PCES grant proposal that was awarded to ISIS. My Ph.D. dissertation came from work on this project.

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**Publications****Please note: All publications are available at <http://gray.cs.ua.edu>***Refereed  
Journals*Jeremy Zelkowski, Rebecca Odom-Bartel, and Jeff Gray, "Examining the Impact on TPACK and Knowledge Subcomponents in Dually Certifying Secondary Mathematics Teacher Candidates with a Computer Science add-on Endorsement," *Journal of Research on Technology in Education*, accepted.Nicole Ruggiano, Tish Winton, Jane Daquin, Zhe Jiang, Monica Herzog, and Jeff Gray, "The Potential of Crowdsources Asset Mapping Technologies for Supporting Dementia Caregivers," *Innovation in Aging*, Volume 7, Issue Supplement\_1, December 2023, page 534.Yan Luo, Nicole Ruggiano, David Bolt, John-Paul Witt, Monica Anderson, Jeff Gray, and Zhe Jiang, "Community Asset Mapping in Public Health: A review of Applications and Approaches," *Social Work in Public Health*, April 2023, vol. 38, no. 3, pp. 171-181.Xin Zhao and Jeff, Gray, "Towards a Metrics Suite for the Complexity Analysis of LabVIEW Systems Models," *Science of Computer Programming*, April 2023, vol. 227, article 102931, 26 pages.

Nicole Ruggiano, Yan Luo, Amy Hurd, Kristen Lawlor, Monica Anderson, Zhe Jiang, Jeff Gray, "Developing Information Technologies to Promote Dementia e-Friendly Communities for COVID-19 and Beyond," *Innovation in Aging*, Volume 5, Issue Supplement\_1, 2021, page 639.

Saheed Popoola, Xin Zhao, and Jeff Gray, "Evolution of Bad Smells in LabVIEW Graphical Models," *Journal of Object Technology*, vol. 20, no. 1, January 2021, pp. 1-15.

Ferosh Jacob, Md Ashfakul Islam, Jeff Gray, Brandon Dixon, Susan Vrbsky, Puri Bangalore, "PNBSolver: A Domain-Specific Language for Modeling Parallel N-body Problems," under review

Yao Pan, Jules White, Yu Sun, and Jeff Gray, "Gray Computing: A Framework for Computing with Background JavaScript Tasks," *IEEE Transactions on Software Engineering*, vol. 45, no. 2, February 2019, pp. 171-193.

Brian Eddy, Nicholas Kraft, and Jeff Gray, "Impact of Structural Weighting on a Latent Dirichlet Allocation Based Feature Location Technique," *Journal of Software: Evolution and Process*, vol. 30, no. 1, January 2018, pp. 1-25.

David Bau, Jeff Gray, Caitlin Kelleher, Josh Sheldon, Franklyn Turbak, "Learnable Programming: Blocks and Beyond," *Communications of the ACM*, vol. 60, no. 6, June 2017, pp. 72-80.

Elizabeth Williams, Jeff Gray, and Brandon Dixon, "Improving Geolocation of Social Media Posts," *Pervasive and Mobile Computing* (Special Issue on Pervasive Social Computing; Patrizia Grifoni, Fernando Ferri, Alessia D'Andrea, Tiziana Guzzo, Andrea Passarella, Guest Editors), vol. 36, April 2017, pp. 68-79.

Jonathan Corley, Brian P. Eddy, Eugene Syriani, and Jeff Gray, "Efficient and Scalable Omniscient Debugging for Model Transformations," *Software Quality Journal* (Special Issue on Program Debugging: Research, Practice and Challenges; Sudipto Ghosh and Jenny Li, Guest Editors), vol. 25, no. 1, January 2017, pp. 7-48.

Huseyin Ergin, Eugene Syriani, and Jeff Gray, "Design Pattern Oriented Development of Model Transformations," *Computer Languages, Systems & Structures*, Volume 46, November 2016, pp. 106-139.

Songqing Yue and Jeff Gray, "Transforming C Applications with Metaprogramming," *International Journal of Computers and Their Applications*, vol. 23, no. 1, March 2016, pp. 57-68.

Yu Sun, Jeff Gray, and Jules White, "A Demonstration-based Model Transformation Approach to Automate Model Scalability," *Journal of Software and Systems Modeling*, vol. 14, no. 3, July 2015, pp. 1245-1271.

Amber Wagner and Jeff Gray, "An Empirical Evaluation of a Vocal User Interface for Programming by Voice," *International Journal of Information Technologies and Systems Approach* (Special Issue on Human-Computer Interaction, Carina Gonzalez, editor), vol. 8, no. 2, May 2015, pp. 47-63.

Songqing Yue and Jeff Gray, "SPOT: A DSL for Extending Fortran Programs with Metaprogramming," *Advances in Software Engineering*, Volume 2014, pp. 1-23.

Benoit Combemale, Julien DeAntoni, Benoit Baudry, Robert B. France, Jeff Gray, and Jean-Marc Jézéquel, "Globalizing Modeling Languages," *IEEE Computer*, June 2014, pp. 68-71.

Tomaz Kosar, Tomaz Kos, Jeff Gray, and Marjan Mernik, "Debugging Measurement Systems Using a Domain-Specific Modeling Language," *Computers in Industry*, vol. 65, no. 4, May 2014, pp. 622-635.

James Edmondson, William Anderson, Jeff Gray, Joe Loyall, Jules White, and Klaus Schmid, editors, *IEEE Software*, special issue on "Next Generation Mobile Computing," vol. 31, no. 2, March/April 2014, pp. 44-47.

Ferosh Jacob, Adam Wynne, Yan Liu, and Jeff Gray, "Domain-Specific Languages for Developing and Deploying Signature Discovery Workflows," *IEEE Computing in Science and Engineering*, January/February 2014, vol. 16, no. 1, pp. 52-64.

Jeff Gray, Juha-Pekka Tolvanen, and Matti Rossi, "Guest Editorial to the Special Section on Domain-Specific Modeling in Theory and Applications," *Journal of Software and Systems Modeling*, vol. 13, no. 1, January 2014, pp. 5-7.

Yu Sun, Jeff Gray, Romain Delamare, Benoit Baudry, and Jules White, "Automating the Maintenance of Non-functional System Properties using Demonstration-based Model Transformation," *Journal of Software: Evolution and Process*, vol. 25, no. 12, December 2013, pp. 1335-1356.

Hyun Cho, Jeff Gray, and Yuanfang Cai, "Quality Aware Abstraction Layer Management for Software Product Lines," *Scientific Research and Essays* (Special Issue on Software Quality), accepted for publication.

Tomaz Lukman, Giovanni Godena, Jeff Gray, Marjan Hericko, and Stanko Strmcnik, "Model-Driven Engineering of Process Control Software – Beyond Device-Centric Abstractions," *Control Engineering Practice*, vol. 21, no. 8, August 2013, pp. 1078-1096.

Richard Paige and Jeff Gray, "Guest Editorial to the Special Section on Model Transformation," *Journal of Software and Systems Modeling*, vol. 12, no. 1, January 2013, pp. 85-87.

Ferosh Jacob, Jeff Gray, Jeffrey C. Carver, Marjan Mernik, and Purushotham Bangalore, "PPModel: A Modeling Tool for Source Code Maintenance and Optimization of Parallel Programs," *Journal of Supercomputing*, vol. 62, no. 3, December 2012, pp. 1560-1582.

Robert Tairas and Jeff Gray, "Increasing Clone Maintenance Support by Unifying Clone Detection and Refactoring Activities," *Journal of Information and Software Technology*, vol. 54, December 2012, pp. 1297-1307.

Philip Langer, Manuel Wimmer, Jeff Gray, Gerti Kappel and Antonio Vallecillo, "Language-Specific Model Versioning Based on Signifiers," *Journal of Object Technology* (Special Issue on Model Comparison -Davide Di Ruscio and Dimitris Kolovos, eds.), vol. 11, no. 4, October 2012, pp. 1-34.

Ferosh Jacob, Jeff Gray, Songqing Yue, and Nicholas Kraft, "Modulo-F: A Modularization Language for FORTRAN Programs," *Journal of Convergence Information Technology*, vol. 7, no. 12, 2012, pp. 256-263.



Qichao Liu, Jeff Gray, Marjan Mernik, Barrett R. Bryant, “Application of Metamodel Inference with Large-scale Metamodels,” *International Journal of Software and Informatics* (Special Issue on Software Modeling and Metamodeling - Hong Zhu, ed.), vol. 6, no. 2, 2012, pp. 201-231.

Shih-Hsi Liu, Adam Cardenas, Marjan Mernik, Barrett R. Bryant, Jeff Gray, and Xang Xiong, “Domain-Specific Language Introduction using Web Service-Oriented Technologies,” *International Journal of Multiagent and Grid Systems*, vol. 8, no. 1, 2012, pp. 19-44.

Ferosh Jacob, Amber Wagner, Prateek Bahri, Susan Vrbsky, and Jeff Gray, “Simplifying the Development and Deployment of MapReduce Algorithms,” *International Journal of Next-Generation Computing* (Special Issue on Cloud Computing – Yugyung Lee and Praveen Rao, eds.), vol. 2, no. 2, 2011, pp. 123-142.

Barrett R. Bryant, Jeff Gray, Marjan Mernik, Peter J. Clarke, Robert B. France, Gabor Karsai, “Challenges and Directions in Formalizing the Semantics of Modeling Languages,” *Journal of Computer Science and Information Systems* (Special Issue on Advances in Formal Languages, Modeling and Applications), vol. 8, no. 2, 2011, pp. 225-253.

Suman Roychoudhury, Jeff Gray, and Frédéric Jouault, “A Model-Driven Framework for Aspect Weaver Construction,” *Transactions on Aspect-Oriented Software Development*, Springer Verlag LNCS 6580, vol. VIII, 2011, pp. 1-45.

Zekai Demirezen, Yu Sun, Jeff Gray, and Frédéric Jouault, “Enabling Tool Reuse and Interoperability through Model-Driven Engineering,” *Journal of Computational Methods in Science and Engineering (JCMSE)*, vol. 10, no. 2, September 2010, pp. 187-202.

Jeff Gray, Alfonso Pierantonio, and Antonio Vallecillo, “Guest Editorial to the Special Section on Model Transformation,” *Journal of Software and Systems Modeling*, vol. 9, no. 3, June 2010, pp. 281-283.

Xiaoqing Wu, Barrett Bryant, Jeff Gray, and Marjan Mernik, “Component-Based LR Parsing,” *Computer Languages, Systems, and Structures*, vol. 36, no. 1, April 2010, pp. 16-33.

Suman Roychoudhury, Jeff Gray, Jing Zhang, Purushotham Bangalore, and Anthony Skjellum, “A Program Transformation Technique to Support Aspect-Oriented Programming within C++ Templates,” *Journal of Object Technology*, vol. 9, no. 1, January/February 2010, pp. 143-160.

Jules White, Jeff Gray, and Doug Schmidt, “Constraint-Based Model Weaving,” *Transactions on Aspect-Oriented Software Development* (Special Issue on Aspects and MDE - Robert France and Jean-Marc Jezequel, eds.), Springer-Verlag LNCS 5560, vol. VI, 2009, pp. 153-190.

Jules White, James Hill, Sumant Tambe, Aniruddha Gokhale, Doug Schmidt, and Jeff Gray, “Improving Domain-Specific Language Reuse through Software Product Line Configuration Techniques,” *IEEE Software* (Special Issue on Domain-Specific Languages and Modeling – Jonathan Sprinkle, Marjan Mernik, Juha-Pekka Tolvanen, and Diomidis Spinellis, eds.), vol. 26, no. 4, July/August 2009, pp. 47-53.

Jean Bezivin, Alfonso Pierantonio, Antonio Vallecillo, and Jeff Gray, “Guest Editorial to the Special Section on Model Transformation,” *Journal of Software and Systems Modeling*, Volume 8, Number 3, July 2009, pp. 303-304.

Damijan Rebernak, Marjan Mernik, Hui Wu, and Jeff Gray, "Domain-Specific Aspect Languages for Modularizing Crosscutting Concerns in Grammars," *IET Software* (Special Issue on Domain-Specific Aspect Languages), vol. 3, no. 3, June 2009, pp.184-200.

Robert Tairas and Jeff Gray, "An Information Retrieval Process to Aid in the Analysis of Code Clones," *Empirical Software Engineering* (Special Issue on Information Retrieval for Program Comprehension – Tim Menzies and Letha Etzkorn, eds.), vol. 14, no.1, February 2009, pp. 33-56.

Suman Roychoudhury, Jeff Gray, Jing Zhang, Purushotham Bangalore, and Anthony Skjellum, "Modularizing Scientific Libraries with Aspect-Oriented and Generative Programming Techniques," *Acta Electrotechnica et Informatica*, vol. 9, no. 3, 2009, pp. 16-23.

Yuehua Lin, Jeff Gray, Jing Zhang, Steve Nordstrom, Aniruddha Gokhale, Sandeep Neema, and Swapna Gokhale, "Model Replication: Transformations to Address Model Scalability," *Software: Practice and Experience*, vol. 38, no. 14, November 2008, pp. 1475-1497.

Hui Wu, Jeff Gray, and Marjan Mernik, "Grammar-Driven Generation of Domain-Specific Language Debuggers," *Software: Practice and Experience*, vol. 38, no. 10, August 2008, pp. 1073-1103.

Faizan Javed, Marjan Mernik, Jeff Gray, and Barrett Bryant, "MARS: A Metamodel Recovery System using Grammar Inference," *Journal of Information and Software Technology*, vol. 50, nos. 9/10, July 2008, pp. 948-968.

Faizan Javed, Marjan Mernik, Jeff Gray, Jing Zhang, Barrett Bryant, and Suman Roychoudhury, "Using a Program Transformation Engine to Infer Types in a Metamodel Recovery System," *Acta Electrotechnica et Informatica*, vol. 8, no. 1, January-March 2008, pp. 3-10.

Jing Zhang, Jeff Gray, Yuehua Lin, and Robert Tairas, "Aspect Mining from a Modeling Perspective," *International Journal of Computer Applications in Technology* (Special Issue on Concern-Oriented Software - Hongji Yang, William Chu, and Jianjun Zhao, eds.), vol. 31, nos. 1/2, January 2008, pp. 74-82.

Alfonso Pierantonio, Antonio Vallecillo, Bran Selic, and Jeff Gray, "Preface: Special Issue on Model Transformation," *Science of Computer Programming*, vol. 68, no. 3, October 2007, pg. 111-113.

Yuehua Lin, Jeff Gray, and Frédéric Jouault, "DSMDiff: A Differentiation Tool for Domain-Specific Models," *European Journal of Information Systems* (Special Issue on Model-Driven Systems Development – Mark Lycett, Esperanza Marcos and Veda Storey), vol. 16, no. 4, August 2007, pp. 349-361.

Dimple Kaul, Arundhati Kogekar, Aniruddha Gokhale, Jeff Gray, and Swapna Gokhale, "POSAML: A Visual Modeling Framework for Middleware Provisioning," *Journal of Visual Languages and Computing* (Special Issue on Visual Interactions in Software Artifacts – Guido Wirtz and Kang Zhang, eds.), vol. 18, no. 4, August 2007, pp. 359-377.

Upsorn Praphamontriping, Swapna Gokhale, Aniruddha Gokhale, and Jeff Gray, "An Analytical Approach to Performance Analysis of an Asynchronous Web Server," *Simulation: Transactions of the Society for Modeling and Simulation*, vol. 83, no. 8, August 2007, pp. 571-586.

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Rajesh Sudarsan and Jeff Gray, "Meta-Model Search: Using XPath to Search Domain-Specific Models," *Journal of Research and Practice in Information Technology* (Special Issue on Software Engineering - Hassan Reza and Emanuel Grant, eds.), vol. 38, no. 4, November 2006, pp. 337-351.

Francisco Hernandez, Purushotham Bangalore, Jeff Gray, Zhijie Guan, and Kevin Reilly, "GAUGE: Grid Automation and Generative Environment," *Concurrency and Computation: Practice and Experience* (Special Issue on Grid Workflow - Geoffrey Fox and Dennis Gannon, eds.), vol. 18, no. 10, August 2006, pp. 1293-1316.

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#### *Edited Journals*

Jeff Gray and Vinay Kulkarni, “Introduction to the special section of the 20th International Conference on Model-Driven Engineering Languages and Systems (MODELS'17),” *Journal of Software and Systems Modeling*, vol. 19, no. 1, January 2020, pp. 15-16.

James Edmondson, William Anderson, Jeff Gray, Joe Loyall, Jules White, and Klaus Schmid, guest editors, *IEEE Software*, special issue on “Next Generation Mobile Computing,” Volume 31, Number 2, March/April 2014, pp. 44-47.

Jeff Gray, Juha-Pekka Tolvanen, and Matti Rossi, guest editors, *Journal of Software and Systems Modeling*, Volume 13, Number 1, January 2014, pp. 5-7.

Richard Paige and Jeff Gray, guest editors, *Journal of Software and Systems Modeling*, special issue on “Model Transformation: Best Papers from ICMT 2009,” Volume 12, Number 1, January 2013, pp. 85-87.

Jeff Gray, Alfonso Pierantonio, and Antonio Vallecillo, guest editors, *Journal of Software and Systems Modeling*, special issue on “Model Transformation: Best Papers from ICMT 2008,” Volume 9, Number 3, June 2010, pp. 281-283.

Jean Bezivin, Jeff Gray, Alfonso Pierantonio, and Antonio Vallecillo, guest editors, *Journal of Software and Systems Modeling*, special issue on “Model Transformation,” Volume 8, Number 3, July 2009, pp. 303-364.

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Omar Aldawud, Walter Cazzola, Tzilla Elrad, Jeff Gray, and Jörg Kienzle, guest editors, *Journal of Object Technology*, special issue on “Aspect-Oriented Modeling,” Volume 6, Number 7, August 2007, pp. 5-193.

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Benoît Combemale, Jeff Gray, and Bernhard Rumpe, “How to Define Modeling Languages?,” *Journal of Software and Systems Modeling*, vol. 22, no. 2, February 2023, pp. 449-451.

Stéphanie Challita, Benoît Combemale, Hüseyin Ergin, Jeff Gray, Bernhard Rumpe, and Martin Schindler, “Report on the State of the SoSyM Journal: End of 2022,” *Journal of Software and Systems Modeling*, vol. 22, no. 1, January 2023, pp. 1-7.

Jeff Gray and Bernhard Rumpe, “Reflection on the Differences between Modeling and Programming,” *Journal of Software and Systems Modeling*, vol. 21, no. 6, August 2022, pp. 2097-2099.

Jeff Gray and Bernhard Rumpe, “Modeling of, for, and with Digital Twins,” *Journal of Software and Systems Modeling*, vol. 21, no. 5, July 2022, pp. 1685-1686.

Jeff Gray and Bernhard Rumpe, “On the Relationship between Models and Ontologies,” *Journal of Software and Systems Modeling*, vol. 21, no. 4, June 2022, pp. 1271-1272.

Jeff Gray and Bernhard Rumpe, “Explicit Versus Implicit Models: What are Good Languages for Modeling,” *Journal of Software and Systems Modeling*, vol. 21, no. 3, May 2022, pp. 839-841.

Jeff Gray and Bernhard Rumpe, “Modeling in Advanced Systems Engineering,” *Journal of Software and Systems Modeling*, vol. 21, no. 2, March 2022, pp. 435-436.

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Geri Georg, Jeff Gray, Bernhard Rumpe, and Martin Schindler, "SoSyM Reflections of 2017: A Journal Status Report," *Journal of Software and Systems Modeling*, vol. 17, no. 1, January 2018, pp. 1-4.

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Jeff Gray, *Introduction to Programming and Problem Solving*, Computer Science 100 Class Pack, August 1996, pp. 1-165.

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Matthew Curry and Jeff Gray, "BibPort: Creating Bibliographic References," *Dr. Dobbs Journal*, February 2008, pp. 30-38.

Jeff Gray, "VMS Worm," *2600: The Hacker Quarterly*, Summer 1989, pp. 38-40.

"Ants Climbing Trees: Heap Memory Management in Ada," *Embedded Systems Programming*, April 1990, pp. 23-26.

*Tech Reports*

Jane L. Snowdon and Jeffrey G. Gray, "A Survey and Evaluation of Technologies for Supporting Component-based Development," IBM Research Report, RC-20536 (91052), IBM TJ Watson Research Center, Yorktown Heights, NY, August 9, 1996, pp. 1-46.

Murali Sitaraman and Jeff Gray, "A Context for Introducing SE Principles in a Traditional CS Second Course," Department of Statistics and Computer Science, West Virginia University, Morgantown, WV, TR 93-2, March 23, 1993, pp. 1-14.

*Unrefereed  
Conferences*

Jeff Gray, Mary Boehm, and Carol Crawford, "A Professional Development Model to Train 50 Alabama High School Teachers on the New CS Principles College Board AP Exam," *American Society for Engineering Education Southeast Section Conference*, Tuscaloosa, AL, March 2016.

Daniela Marghitu, Jeff Gray, and Mike Wyss, "Robotics as an Entrée to K-12 Computer Science for Underrepresented Students," *American Society for Engineering Education Southeast Section Conference*, Tuscaloosa, AL, March 2016.

Amber Wagner and Jeff Gray, "Accessible Design," *Southeast Women in Computing (SEWIC)*, Atlanta, GA, November 2015.

Jeff Gray, Jill Westerlund, and Carol Crawford, *50<sup>th</sup> Alabama Business Education Academy Conference*, Hoover, AL, February 2015.

Jeff Gray and Amber Wagner, "Lessons Learned in Piloting a CS Principles Course," *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2012.

Jeff Gray, “The Engaging Influence of Mobile Computing as a New Context for Teaching Computer Science,” *University of Alabama CIT Faculty Technology Showcase*, March 2012.

Jeff Gray and Dixon Shuttleworth, “Introducing Computer Science within a Predominantly Minority Urban School System,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2009.

Jeff Gray, “Integrating Alice into K-12 Outreach Events,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2006.

Jeff Gray, Yuehua Lin, and Jing Zhang, “Transformations to Support Model Evolution and Scalability,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2005.

Jeff Gray, “Introducing High School Students to Java through Lego Robot Experiments,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2004.

Jeff Gray, Yuehua Lin, and Jing Zhang, “Degrees of Independence in Aspect-Oriented Modeling to Support Two-Level Weaving,” *Real-Time CORBA Component Model Workshop*, Washington University, St. Louis, Missouri, March 1, 2003.

Jeff Gray, “Raising Aspect-Orientation to Higher Levels of Abstraction,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2002.

Jeff Gray and George Bloor, “Application Integration,” *Boeing’s 3rd Annual Product Data Exchange Conference*, Mesa, AZ, October 2000.

Jeff Gray, “A Generator for Model Interpreters,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 1999.  
**(Doctoral Division – 1<sup>st</sup> Place)**

Jeff Gray, “Some Observations on Component-Based Software Development,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 1996.

Jeff Gray, “Improving Completeness and Consistency in Object-Oriented Analysis through Adaptable Formalisms,” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 1995.

*Keynote/Invited Presentation* “K-12 Computer Science Across Alabama,” *Tuscaloosa Rotary Luncheon*, Indian Hills Country Club, Tuscaloosa, AL, February 5, 2019.

“The Obstacle is the Way: Joyriding on the PhD Roller Coaster,” *Doctoral Symposium Keynote at Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 16, 2018.

“Design Patterns across the Modeling Process,” *Workshop on Patterns in Model Engineering (PAME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint Malo, France, October 3, 2016. CEUR Volume 1693, page 1.

“Trends in Research Topics Relevant to Home Retail,” Home Depot Corporate Headquarters, Atlanta, GA, May 26, 2016.

“The Surge in K-12 Computer Science Education: What can you do to help?” *ACM Mid-Southeast Conference*, Gatlinburg, TN, November 14, 2014.

Jan Cuny and Jeff Gray (shared talk), “CS 10K: Transforming High School Computing (and Why Higher Ed Should Help),” *Annual Conference of the Association of Public and Land-grant Universities – Science and Mathematics Teacher Imperative (APLU/SMTI)*, St. Louis, MO, June 6, 2013.

“End-User Software Development through Demonstration-Based Modeling,” *Extreme Modeling (XM)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Innsbruck, Austria, October 1, 2012.

“Automating Software Evolution through Model-Driven Engineering,” *Nebraska Research and Innovation Conference*, Qwest Center, Omaha, NE, September 27, 2011.

“Model Comparison: The Marrow of Model Transformation,” *International Workshop on Model Comparison in Practice*, a workshop held at the *International Conference on Model Transformation*, Malaga, Spain, July 21, 2010.

“Automating Software Evolution through Model-Driven Engineering,” *Eighth Annual Colloquium on Information Technology*, Troy University – Rosa Parks Museum Auditorium, Montgomery, Alabama, April 3, 2007.

*K-12 Outreach and Professional Development* College Board Advanced Placement Summer Institutes – CS Principles

- June 20-23, 2016: Walton High School, Marietta, GA
- June 27-30, 2016: University of Alabama, Tuscaloosa, AL
- July 18-22, 2016: Colorado School of Mines, Golden, CO
- July 26-29, 2016: Lewes APSI, Lewes, DE
- July 17-21, 2017: Colorado School of Mines, Golden, CO

Code.org Computer Science Fundamentals K5 Training Workshops

- October 25, 2014: Indianapolis City Schools (with Michele Roberts at IUPUI)
- December 5, 2014: Mt. Brook Schools
- December 8, 2014: Tuscaloosa City Schools
- December 11 and 12, 2014: Pelham City Schools
- January 9, 2014: Selma
- January 12, 2014: Jacksonville
- January 26, 2015: Hoover City Schools
- January 29, 2015: Huntsville (at UAH)
- January 30, 2015: Decatur
- February 4, 2015: Tuscaloosa City Schools
- February 16, 2015: American Christian Academy (Tuscaloosa-private)
- February 23, 2015: Auburn City Schools
- April 1, 2015: Tuscaloosa County Schools
- April 20, 2015: Fort Payne
- May 11, 2015: Tuscaloosa City Schools
- September 8, 2015: Montgomery Public Schools
- September 9, 2015: Prattville
- October 12, 2015: Tuscaloosa County Schools
- December 9 and 10, 2015: Florence
- January 6 and 7, 2016: Shelby County
- January 18, 2016: Haleyville
- May 5 and 6, Elmore County
- May 11 and 12, 2016: Eufaula
- June 1 and 2, 2016: Calhoun County
- July 25, 2016: Lewes, Delaware
- August 31, 2016: Tuscaloosa
- September 19, 2016: Decatur
- September 21, 2016: UAH
- October 11, 2016: Rainsville
- January 2, 2017: Birmingham – Bruno Montessori
- January 3, 2017: Montgomery Public Schools
- January 4, 2017: Auburn City Schools
- January 5, 2017: Sylacauga City Schools
- March 13, 2017: Hoover City Schools
- May 2, 2017: Jacksonville State University In-service
- May 3, 2017: Jacksonville State University In-service
- August 1, 2017: Fayetteville, TN
- August 2, 2017: University of North Alabama In-service
- August 3, 2017: Chilton County
- September 27, 2017: Tuscaloosa City and County Schools
- November 7, 2017: Eufaula City Schools
- November 29, 2017: Hoover City Schools
- December 15, 2017: University of Alabama AMSTI
- December 28, 2017: Lewes, Delaware
- January 3, 2018: Moody Elementary School
- January 5, 2018: Athens Public Library

- March 8, 2018: Cullman City Schools
- March 9, 2018: Cullman City Schools
- March 22, 2019: Trussville City Schools
- March 23, 2018: Alexander City Schools
- April 27, 2018: Gardendale City Schools
- May 10, 2018: Elmore County Schools
- August 3, 2018: Greene County Schools
- September 25, 2018: Tuscaloosa City Schools
- October 1, 2018: Elmore County Schools
- February 18, 2019: Sumter County Schools
- February 19, 2019: Tuscaloosa County Schools (Mercedes-Benz)
- May 3, 2019: Russellville
- May 9, 2019: Athens City Schools
- August 5, 2019: Sumter County Schools
- August 6, 2019: Bibb County Schools
- September 25, 2019: Tuscaloosa City Schools
- December 9, 2019: Huntsville City Schools
- December 12, 2019: Athens City Schools
- February 4, 2022: Sipsey Valley High School
- December 9, 2022, Russell County High School
- March 3, 2023, Enterprise High School

#### Weekly Robotics Training Classes:

Spring 2017: Rock Quarry Middle School, Tuscaloosa Magnet Middle School, Oak Hill School, Westlawn Middle School, Central High School, Gateway Library

Spring 2015: University Place Elementary, Southview Middle School, Collins-Riverside Middle School, Davis-Emerson Middle School, Central High School

Spring 2014: Arcadia Elementary, University Place Elementary, Verner Elementary, Rock Quarry Middle School, Tuscaloosa Magnet Middle School, Southview Middle School, Westlawn Middle School, University Place Middle School, Bryant High School, Central High School, Northridge High School, Tuscaloosa Career and Technology Academy

Fall 2013: Tuscaloosa City Schools

Spring 2013: Arcadia Elementary School, University Place Elementary School, Verner Elementary School, Eastwood Middle School, Rock Quarry Middle School, Tuscaloosa Magnet Middle School, Oak Hill School, Carver High School, Northridge High School, Tuscaloosa Mathematics and Science Home School.

Spring 2012: Tuscaloosa Magnet School, Oak Hill High School, Carver High School, Eastwood Middle School

Fall 2011: Tuscaloosa Magnet School

#### “Hour of Code” school visits:

December 2019

- Northridge HS (45 students, 3 sessions)

December 2018:

- Central HS (35 students, 2 sessions)
- TCTA (45 students, 2 sessions)
- Northridge Middle (85 students, 4 sessions)
- Eastwood Middle (27 students, 1 session)

- Verner Elementary (90 students, 4 sessions)
- Woodland Forest Elementary (145 students, 9 sessions)

December 2016:

- Gaston School (online, 22 students, 1 session)
- Tuscaloosa Magnet Middle (115 students, 5 sessions)
- Alberta School of Performing Arts (72 students, 2 sessions)
- University Place Middle (120 students, 6 sessions)
- RQMS (65 students, 3 sessions)
- Central HS (22 students, 1 session)

December 2015:

- Gordo High School (110 students, 7 sessions)
- Tuscaloosa Magnet Elementary (30 students)
- Carver High School (20 students)

December 2014:

- Pinson Valley High School (40 students, 2 sessions)

December 2013:

- Tuscaloosa Career Technology Academy (240 students, 2 sessions)
- Paul Bryant High School (80 students)
- Northridge High School (70 students, 2 sessions)
- Shades Valley Elementary (60 students, 2 sessions)
- Carver High School (60 students)
- Oak Hill High School (30 students)
- Central High School (20 students)

“Preparing for the Alabama Robotics Contest,” *Alabama Black Belt Bridge Builders*, All-day Workshop, February 2, 2019.

Coordinator of the *College of Engineering STEM Outreach Career Fair*, Greensboro, AL, November 7, 2014.

“Recruiting for Computer Science Principles,” Tuscaloosa City Schools’ Counselor Professional Development, February 21, 2014.

Middle School Computer Science Curriculum Planning Meeting, Hoover City Schools, January 22, 2014.

“Career Opportunities in Computer Science,” Tuscaloosa City Schools’ Counselor Professional Development, August 15, 2012.

“Computer Science Opportunities at UA”

- Brookwood Middle School, March 3, 2020
- Principal’s Meeting: Tuscaloosa City Schools, February 26, 2020
- Huntsville High School, January 31, 2020
- New Century Technology High School, January 31, 2020
- American Christian Academy, March 6, 2019
- Paul Bryant High School, February 14, 2019
- Tuscaloosa County High School, May 22, 2017
- Tuscaloosa Academy, April 10, 2017
- Hillcrest High School, (2 classes), February 27, 2017
- Riverchase Elementary School (8 sessions), January 27, 2017
- Echols Middle School (2 classes), October 19, 2016
- Bob Jones High School (4 classes), September 20, 2016

- Tuscaloosa Center for Technology Academy, April 29, 2016
- Gordo Elementary School (4 sessions), April 28, 2016
- Lawson State Community College, January 29, 2016
- Riverchase Elementary School (8 sessions), January 29, 2016
- Florence High School, September 4, 2015
- Francis Marion High School, April 17, 2015
- Gordo Public Library, June 18, 2014
- Faucett Vestavia Elementary School, May 16, 2014
- Hoover High School, May 2, 2014
- West Side Scholars Academy, April 26, 2014
- Francis Marion High School, April 10, 2014
- ACIPCO Engineering Explorers, February 18, 2014
- Berry Middle School, January 22, 2014
- Riverchase Elementary School, January 22, 2014
- Northridge High School (2 classes), March 8, 2013
- Muscle Shoals High School (over 100 students in grades 10-12, April 18, 2013
- Muscle Shoals Middle School (over 440 students in grades 6-7), April 18, 2013
- University of Alabama-Tuscaloosa, Junior Chapter of the National Society of Black Engineers (UAT-NSBE), Tuscaloosa, AL, April 14, 2013
- Tuscaloosa County High School, April 4, 2013
- Carver High School, February 28, 2013
- Riverchase Elementary School (6 sessions), February 19, 2013
- Bragg Middle School, February 19, 2013
- Shades Valley High School (4 classes), February 7, 2013
- Shelby County High School (2 classes), February 1, 2013
- LeCroy Career Technical Center/Chilton County (2 classes), February 1, 2013
- Tuscaloosa Center for Technology, May 2, 2012
- Mt. Olive Elementary School, March 6, 2012
- Riverchase Elementary School, February 29, 2012
- Eastwood Middle School, February 17, 2012
- Bryant High School, January 20, 2012 and April 24, 2012
- John Carroll High School, January 19, 2012
- Oak Hill High School, January 13, 2011
- Carver High School, January 12, 2011
- Eastwood Middle School Career Fair, November 17, 2011
- ACIPCO Engineering Explorers, November 8, 2011
- Muscle Shoals HS, October 5, 2011
- Bragg Middle School (2 classes), September 16, 2011
- Tuscaloosa Magnet School (2 classes), August 17, 2011
- Tuscaloosa Magnet School (2 classes), August 15, 2011
- Amelia Love Johnson High School, May 17, 2011
- Booker T. Washington High School (2 classes), May 2, 2011
- Bragg Middle School, April 21, 2011
- Bumpus Middle School, April 15, 2011
- Riverchase Elementary School, March 8, 2011
- American Christian Academy (entire 10th grade), February 8, 2011
- Mt. Olive Elementary School, December 10, 2010
- Tuscaloosa Academy (2 classes), December 6, 2010
- McAdory High School, October 27, 2010
- Alabama School of Math and Science (3 classes), October 11, 2010
- Bayside Academy, October 11, 2010
- UA Engineering Day, October 7, 2010
- UA SITE Engineering Summer Camp, July 12, 2010
- Rainbow Elementary School, April 13, 2010
- Sparkman High School (2 classes), April 13, 2010



- Tuscaloosa Explorer Scouts, April 12, 2010
- Spain Park High School, April 9, 2010
- Bob Jones High School (4 classes), March 26, 2010
- Gardendale High School Engineering Class, March 25, 2010
- Riverchase Elementary School Career Tech Day, March 9, 2010
- Gardendale High School Engineering Class, March 8, 2010
- Holy Family High School, January 12 and 26, 2010
- Vestavia Hills Elementary School, January 7, 2010

“Computer Science Opportunities at UAB”

- Carver High School, December 10, 2009
- Ft. Payne High School, November 20, 2009
- Huffman High School, November 9, 2009
- Alabama School of Fine Arts, *Math/Science Lecture Series*, November 6, 2009
- Clay-Chalkville High School, September 25, 2009
- Phillips Academy (Superintendent’s Academy), June 26, 2009
- AMSTI Teacher Training at North Jefferson Middle School, June 10, 2009
- Riverchase Elementary School (Alice Club), May 6, 2009
- Bragg Middle School, May 5, 2009
- Clay-Chalkville High School, April 28, 2009
- Deer Valley Elementary School, April 24, 2009 (All day)
- Woodlawn High School, April 7, 2009
- Vestavia Hills High School, April 3, 2009
- Woodlawn High School, March 31, 2009
- Riverchase Elementary School Career Tech Day, March 10, 2009 (All day)
- Hewitt Trussville Middle School, March 9, 2009
- Ramsay High School Career Fair, February 27, 2009
- McAdory High School, February 20, 2009
- Spain Park High School, February 20, 2009
- Homewood Middle School, January 20, 2009
- University of Alabama-Tuscaloosa, Junior Chapter of the National Society of Black Engineers (UAT-NSBE), Tuscaloosa, AL, January 18, 2009
- Riverchase Elementary School, December 10, 2008
- Irondale Community School, December 9, 2008
- Mountain Brook Elementary School, December 8, 2008
- N.E. Miles Jewish Day School, December 3, 2008
- Everest Academy, November 14, 2008
- Calvary Christian, November 14, 2008
- Gardendale High School Career Fair, October 28, 2008 (All day)
- Linsly School, Wheeling, WV, October 24, 2008
- Morgan Academy, Selma, AL, October 3, 2008
- Ramsay High School, September 5, 2008
- Carver High School, September 4, 2008
- AMSTI Teacher Training at Gardendale Elementary School, June 13, 2008
- AMSTI Teacher Training at Shades Valley High School, June 6, 2008
- Hayden Middle School, May 22, 2008
- Eura Brown Elementary, Gadsden, AL, May 20, 2008 (All day)
- Riverchase Elementary, April 9, 2008
- Westminster School, April 3, 2008
- Bragg Middle School, March 12, 2008
- Irondale Community School, March 11, 2008
- Bragg Middle School, March 10, 2008
- The Highlands School, February 14, 2008.
- Irondale Community School, February 14, 2008.
- Mountain Brook Boy Scouts Monthly Meeting, April 30, 2007

- West End High School, March 30, 2007
- Alabama School of Fine Arts, January 26, 2007
- Vestavia Hills High School, November 3, 2006
- The Altamont School, November 3, 2006
- Neighborhood Housing Services of Birmingham, October 14, 2006
- Consortium for Computer Sciences in Colleges, Lipscomb University, Nashville TN, October 10-11, 2006
- Gardendale High School, September 26, 2006
- Alabama School of Math and Science, Mobile, AL, September 22, 2006
- Fultondale High School, September 15, 2006
- Gardendale Educational Meeting, August 17, 2006
- Briarwood Christian School, June 20, 2006
- The Altamont School, June 6, 2006
- Vestavia Hills High School, May 30, 2006
- Mountain Brook High School, April 14, 2006

*Invited  
Presentations*

Jeff Gray and Dawn Morrison, “Pathways for Alabama Computer Science (PACS),” *New Frontiers in K-12 Computer Science Education*, US Department of Education, December 10, 2020.

Jeff Gray, “Preparing for a Robotics Contest with Edison Robots,” *Southern Educational Robotics Conference (SERC)*, virtual event – Auburn University, December 8, 2020.

Jeff Gray and Herart Nurue, “The Role of Computer Science in Building Educational Applications,” *Embassy of the Republic of Indonesia*, virtual event, December 3, 2020.

Jeff Gray, Martha Escobar, Kathy Haynie, Mohammed Qazi, and Yasmeen Rawajfih, “Peer-Learning Communities to Develop Rural, African American Girls' Computer Science Knowledge and Career Awareness,” *NSF ITEST PI and Evaluator Summit*, Arlington, VA, June 13, 2019.

Jeff Gray, “K-12 Computer Science Across Alabama,” *Tuscaloosa Mathcounts Keynote*, University of Alabama, Tuscaloosa, AL, February 23, 2019.

Jeff Gray, “K-12 Computer Science Across Alabama,” *Tuscaloosa Rotary Luncheon*, Indian Hills Country Club, Tuscaloosa, AL, February 5, 2019.

Jeff Gray, “K-12 Computer Science in Alabama,” *AdvancED Stem Summit Keynote*, Montgomery, AL, October 2, 2018.

Jeff Gray, “K-12 Computer Science in Alabama,” Opening Session, *Governor's Computer Science Summit*, Montgomery, AL, March 14, 2018.

Jeff Gray, “Summary of CS4Alabama,” *NSF STEM+C PI Meeting*, Denver CO, March 28, 2017.

Amber Wagner, Jeff Gray, Daniela Marghitu, Andreas Stefik, “Raising the Awareness of Accessibility Needs in Block Languages,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Memphis, TN, March 2016, pp. 497.

In their absence, I was invited to present the following paper by Yu Sun, Jules White, and Sean Eade, “A Model-Based System to Automate Cloud Resource Allocation and Optimization,” *Model Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

“Understanding CS Principles for Teachers,” (with Kelly Powers), *Google/CSTA CS Principles Summit*, St. Charles, IL, July 16, 2014.

URL: <https://www.youtube.com/watch?v=4V5kivPETgk>

“Hot Topics for Administrators,” (with Rebecca Dovi), *Google/CSTA CS Principles Summit*, St. Charles, IL, July 16, 2014.

“CS4Alabama: K-12 Computer Science Education in Alabama,” Society for Information Management Quarterly Meeting, Birmingham, AL, April 16, 2014.

“Foundations of Cooperative Learning to Improve Classroom Engagement,” *CS Principles Pilot Meeting*, Atlanta, GA, March 9, 2014.

“Supporting Software Evolution through Model Transformation,” University of Central Florida, January 9, 2014.

Distinguished Speaker Series: “Supporting Software Evolution through Model Transformation,” University of North Texas, Denton, TX, November 15, 2013.

“A Multi-Tiered Pipeline for K-12 Computer Science Education,” Computer Science Department Seminar, Indiana University-Purdue University Indianapolis (IUPUI), Indianapolis, IN, October 28, 2013.

“End-User Software Development through Demonstration-Based Modeling,” University of Nevada, Reno, NV, February 13, 2013.

“End-User Software Evolution through Demonstration-Based Modeling,” Auburn University, Auburn, AL, November 7, 2012.

“End-User Software Evolution through Demonstration-Based Modeling,” University of Arizona, Tucson, AZ, October 23, 2012.

“End-User Software Evolution through Demonstration-Based Modeling,” Vienna University of Technology and the Austrian Computer Society, Vienna, Austria, September 28, 2012.

“Human Computation: Harnessing the Power of Crowdsourcing and Computers to Achieve Super-linear Results,” The University of Alabama Honors College Assembly Talks, September 19, 2012.

In their absence, I was invited to present the following paper by Martina Seidl and Peter Clarke, “Software Modeling Education,” *MODELS 2011 Educators Symposium*, Wellington, New Zealand, October 2011.

“Automating Software Evolution through Model-Driven Engineering,” Florida International University, Miami, FL, April 8, 2011.

“Automating Software Evolution through Model-Driven Engineering,” Tennessee Technical University, Cookeville, TN, March 17, 2011.

“Using Google App Inventor to Build Android Apps as a Context for Engagement,” NSF ITEST PI Meeting, Arlington, VA, March 4, 2011.

“Automating Software Evolution through Model-Driven Engineering,” University of Nevada, Reno, NV, October 15, 2010.

“Automating Software Evolution through Model-Driven Engineering,” Mississippi State University Department of Computer Science and Engineering, Starkville, MS, April 23, 2010.

“Model Transformation for End-Users,” University of Alabama, Tuscaloosa, AL, July 28, 2009.

“NSF CAREER Discussion,” UAB Grant Club Meeting, June 11, 2009.

“Automating Software Evolution through Model-Driven Engineering,” Drexel University Department of Computer Science Colloquium Series, Philadelphia, PA, April 20, 2009.

“Game Programming with ALICE: How UAB is Using Games to Teach Computing Programming to Birmingham Children,” Donaldson Correction Facility, Bessemer, AL, March 10, 2009.

“CS Jeopardy,” Organizer and Host, UAB CIS Department Seminar, February 29, 2008.

“Reaching out to Alabama Youth with Computer Science Projects,” Sigma Xi (The Scientific Research Society) Lunch Seminar, February 18, 2008.

“Introduction to Domain-Specific Modeling,” *Birmingham Service-Oriented Architecture Meeting*, January 22, 2008.

Marjan Mernik, Jan Heering, Tony Sloane, Jeff Gray, and Hui Wu, “Tool Support for Domain-Specific Languages,” *11<sup>th</sup> International Symposium on Information, Communication, and Automation Technologies*, Sarajevo, Bosnia, October 30, 2007.

“Computing Outreach in Jefferson County,” Jefferson County Board of Education Meeting, October 18, 2007.

Jeff Gray and Cameron McKinley (Alabama Teacher of the Year), “Game Programming for Kids? It’s Elementary using Alice and Scratch,” *Hoover City Schools Technology Symposium*, Spain Park High School, May 31, 2007.f

Marjan Mernik, Hui Wu, and Jeff Gray, “DSL Debugging Framework,” Department Seminar, University of Marne-la-Valle (UMLV), Paris, France, April 3, 2007 (presented by Marjan Mernik).

“Reaching out to Alabama Youth with Computer Science Projects,” Birmingham Optimist’s Club, March 22, 2007.

“Introduction to Robotics through Lego Mindstorms,” Gardendale High School, January 24, 2007.

“Transformations Across Multiple Software Artifacts,” Motorola Research Labs, Chicago, IL, July 24, 2006.

“CS Jeopardy,” Organizer and Host, UAB CIS Department Seminar, April 12, 2006.

“Transformations Across Multiple Software Artifacts,” Computer Science Department Seminar, Indiana University-Purdue University Indianapolis (IUPUI), Indianapolis, IN, March 31, 2006.

“Transformations Across Multiple Software Artifacts,” ISIS Seminar Series, Vanderbilt University, Nashville, TN, November 30, 2005.

Hui Wu and Jeff Gray, “Extending the Eclipse Debug Perspective and JUnit to Support Testing and Debugging of Domain-Specific Languages,” *Magic City Java Users Group*, Birmingham, AL, August 16, 2005.

“Introduction to Lego Robot Programming,” Donaldson Correction Facility, Bessemer, AL, May 3, 2005.

“Transformations Across Software Artifacts,” University of Alabama, Tuscaloosa, AL, February 18, 2005.

“Transforming Legacy Software Using Aspects and Models,” Mississippi State University, Starkville, MS, April 23, 2004.

“Transforming Legacy Software,” *Guest Speaker: Alabama IEEE Section Meeting*, Birmingham, AL, February 2, 2004.

“Enabling Research within the UAB CIS Department,” *Enabling Technologies Symposium* (Organized by Engineering Deans from UA, UAB, UAH), Birmingham, AL, July 31, 2003.

In their absence, I was invited to present the following paper by Aniruddha Gokhale, Douglas Schmidt, Tao Lu, Balachandran Natarajan, and Nanbor Wang: “CoSMIC: An MDA Generative Tool for Distributed Real-time and Embedded Applications,” *Middleware 2003: Workshop on Model-driven Approaches to Middleware Applications Development*, Rio de Janeiro, Brazil, June 2003.

“Modeling with Aspects,” *Invited Speaker: MTSU Computer Science Department*, Murfreesboro, TN, February 6, 2003.

In their absence, I was invited to present the following paper by Aniruddha Gokhale and Balachandran Natarajan: “GriT: A CORBA-based Grid Middleware Architecture,” *36<sup>th</sup> Hawaiian International Conference on System Sciences (HICSS)*, Big Island, HI, January 6-9, 2003, Proceedings on CD-ROM.

“Introducing Aspect-Oriented Programming with AspectJ,” *Guest Speaker: Magic City Java Users Group*, November 19, 2002.

“Metaweavers for Aspect-Oriented Domain Modeling,” *Invited Speaker: Auburn University, Department of Computer Science and Software Engineering*, Auburn, AL, November 15, 2002.

“Using XML to Support Aspect Weaving,” *AOSD Workshop on Interpretation of Concerns in XML*, Enschede, The Netherlands, April 23, 2002.

“A Survey of Some Concerns and Their Separation,” *Vanderbilt Faculty Candidate Series*, Nashville, TN, February 22, 2002.

Title: “Applying Aspect-Oriented Techniques to Domain-Specific Modeling,”

- *University of Alabama Department of Computer Science Colloquium Series*, Tuscaloosa, AL, November 12, 2001.
- *University of Florida Department of Computer and Information Science and Engineering*, Gainesville, FL, January 9, 2002.
- *The University of Alabama-Birmingham Department of Computer and Information Sciences Annual Seminar Series*, Birmingham, AL, January 23, 2002.
- *Ohio State University Guest Speaker Series*, Columbus, OH, January 29, 2002.

“Future Research Directions in Aspect-Oriented Programming,” *University of Alabama Department of Computer Science Colloquium Series*, Tuscaloosa, AL, January 25, 2002.

“Introduction to Aspect-Oriented Programming”

- *Vanderbilt Computer Science Department Seminar*, March 25, 1999
- *ISIS Seminar*, April 1, 1999
- *TCS Management Group*, April 2, 1999

“Technologies for Supporting Component-Based Software Development,” *Vanderbilt Computer Science Department Seminar*, October 3, 1996.

A formal presentation of IBM Research Report RC-20536 (91052) – see above, IBM TJ Watson Research Center, Yorktown Heights, NY, August 9, 1996.

#### *Movies*

“Hello World,” Directed by Shawn Wildermuth, <https://twainfilms.com/hwfilm/>, December 15, 2020.

Personal IMDB: <https://www.imdb.com/name/nm11387319/>

#### *Television/ Newspaper/ Radio Interviews*

Shelly Hollis, Jeff Gray, and Randy Lynn, “Computer Science Legislation,” *Good Things with Rebecca Turner*, SuperTalk Mississippi, March 3, 2020.

Amy Roberts, Shelly Hollis, Jeff Gray, and Tim Mask, “Computer Science Legislation,” *The Gallo Radio Show*, SuperTalk Mississippi, February 27, 2020.

“New law expands computer science in all Alabama schools,” <https://www.tuscaloosaneews.com/news/20190604/new-law-expands-computer-science-in-all-alabama-schools>, June 4, 2019.

Juanita Graham and Jeff Gray, “Keeping Underrepresented Students Together in STEM/CS,” *Talk of Alabama*, ABC 33/40, April 24, 2018.

“Four Robots that Aim to Teach your Kids to Code,” Ryan Nakashima, Associated Press, <https://www.apnews.com/ced0cf2ce0d44209a775f8673841d8ea>, February 12, 2018.

“What’s the Right Age for Kids to Learn Code?” Laurie Dove, <http://now.howstuffworks.com/2016/02/08/whats-the-right-age-kids-learn-code>, February 8, 2016

“Computer Science Booming in Alabama,” Edward Burch, ABC 33/40, Birmingham, AL, June 23, 2015.

Interviewed by WVUA Television regarding UA Robotics Contest, April 5, 2014.

Interviewed by WVUA Radio regarding UA Robotics Contest, April 1, 2014.

Interviewed by WVUA Television, “Web Turns 25,” March 12, 2014.

Interviewed by Timothy Lloyd for “Shortage Of Programmers? Time For Code Red,” *NPR – St. Louis Public Radio*, December 6, 2013.

Interviewed by Adrienne Marshall for “The Door is Wide Open for New Grads in Computing Careers,” *Diversity Careers in Engineering and Information Technology*,

Summer/Fall 2013, pp. 66-70.

“Alabama Found Lacking in Computer Science,” Arielle Clay, Fox 6, Birmingham, AL, May 15, 2013.

Interviewed by Ben Gose for “A Reboot in Recruiting Women into Computer Science,” *The Chronicle of Higher Education*, November 2, 2012, pp. B7-B13.

“\$1 million grant to fund development of new AP Computer Science courses,” Candace Sweat, ABC 33/40, Birmingham, AL, November 30, 2012, Focus@4

“Grant Will Help Train Computer Science Teachers,” Kim Eaton, *Tuscaloosa News*, November 20, 2012.

Interviewed by Afsana Afzal for “UC Berkeley Professors Develop New Computer Science Course,” *The Daily Californian*, Berkeley, CA, September 9, 2012.

“Science Summer Camps Aim to Create New Technology Developers,” Kim Eaton, *Tuscaloosa News*, July 26, 2012.

“2012 UA Robotics Contest,” WVUA, April 21, 2012.

“Reading, Writing, and Robots: Alabama Teachers Go Through Training Workshop,” Wayne Grayson

- *Tuscaloosa News*, November 13, 2011
- *Opelika-Auburn News* (for Associated Press), November 20, 2011

“2011 Google Computer Science for High School – K-12 Teacher Workshop”

- WVUA, Tuscaloosa, AL, July 27, 2011, 6pm Evening News.
- Fox 6, Birmingham, AL, July 26, 2011, 5pm Evening News.

“2011 Summer Computer Camps”

- ABC 33/40, Birmingham, AL, June 15, 2011, 6pm Evening News.

“2009 Summer Robotics Camp”

- NBC 13, Birmingham, AL, June 13, 2009, 6pm Evening News.
- Fox 6, Birmingham, AL, June 15, 2009, 10pm Evening News.

“2009 Alice Festival and Programming Contest”

- NBC 13, Birmingham, AL, May 12, 2009, 10pm Evening News.

“Aladdin at Ramsay High School,” CBS 42, Birmingham, AL, October 14, 2008, 10pm Evening News.

“UAB on YouTube: Ready for Robots,” UAB BlazerCast, July 22, 2008.

“Summer Robotics Camp”

- NBC 13, Reporter: Linda White, Birmingham, AL, July 17, 2008, 6pm Evening News.
- CBS 42, Birmingham, AL, July 17, 2008, 6pm Evening News.
- ABC 33/40, Birmingham, AL, July 17, 2008, 10pm Evening News.
- Fox 6, Birmingham, AL, July 17, 2008, 5pm Evening News.

“Alice Summer Camps”

- CBS 42, Birmingham, AL, June 27, 2008, 6pm Evening News.
- ABC 33/40, Birmingham, AL, June 27, 2008, 10pm Evening News.
- Fox 6, Birmingham, AL, June 27, 2008, 5pm Evening News.

“The Summer Competitive Edge,” NBC 13, Reporter: Bettina Boateng, Birmingham, AL, May 29, 2008, 10pm Evening News.

“Alabama High School Programming Contest and Alice Festival,” NBC 13, Reporter: Bettina Boateng, Birmingham, AL, May 10, 2008, 10pm Evening News.

“UAB Outreach Programs: Middle School Computer Camp,” Fox 6, Reporter: Sarah Verser, Birmingham, AL, July 17, 2007, 5pm Evening News.

“UAB Robotics Camp”

- NBC 13, Birmingham, AL, June 14, 2007, 10pm Late News.
- ABC 33/40, Birmingham, AL, June 14, 2007, 6pm Evening News.

“Computer Science Outreach,” *National Public Radio* (three states – WTSU, WRWA, WTJB), Troy University Public Radio, Montgomery, AL, April 3, 2007.

### Panels

Panel on “WE Build Bridges, SHE Breaks Barriers: Empowering Women in IT and Fostering Allyship,” Birmingham Women in IT Annual Meeting, Birmingham, AL, May 16, 2024.

(Co-Panelists: Charles DeCroes -VP Blue Cross-BlueShield, Delphine Carter - Bouleo, Lisa Evans – CIO Mercedes-Benz USI)

Panel on “Modeling in the Era of Data” *Model Driven Engineering Languages and Systems (MODELS)*, virtual - Montreal, Canada, October 22, 2020.

(Co-Panelists: Marco Brambilla, Zhenjiang Hu, Perdita Stevens, Manuel Wimmer, Tao Yue)

Panel on “Issues in STEM Education Panel,” *Alabama Continuous Improvement Summit*, Montgomery, AL, October 2, 2019.

(Co-Panelists: Sherita Hayes, Sandy Ledwell, Dawn Morrison, Brenda Terry, Tracy Wright).

Panel on “How are States Defining and Measuring BPC?” *ECEP Annual Meeting: Measuring What Matters: Broadening Participation in Computing in the States*, Atlanta, GA, January 26, 2018. (Co-Panelists: Caitlin Dooley, Megean Garvin, Jeff Gray; Moderator: Renee Fall).

Panel on “The Future of Blocks Programming,” *Workshop on Blocks and Beyond: Lessons and Directions for First Programming Environments*, a workshop held at the *IEEE Symposium on Visual Languages and Human-Centric Computing (VL/*

(Co-Panelists: Caitlin Kelleher, John Maloney, Paul Medlock-Walton, Evan Patton, Daniel Wendel; Moderator: Jeff Gray).

Panel on “Teaching the Global Impact of Computing,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Seattle, WA, March 2017.

(Co-Panelists: Jennifer Rosato, Bradley Beth and Nigamanth Sridhar).

Panel on “Piloting AP Computer Science Principles,” *Texas Computer Education Association Conference*, February 2, 2016.

(Co-Panelists: Bill Dunklau, Barrett Bryant, Tony Graham)

Panel on “Should I Stay or Should I Go?” *Model Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, September 30, 2015.

(Co-Panelists: Jean-Marc Jézéquel, Bran Selic, Steve Easterbrook, Friedrich Steimann)



Panel on “Computer Science Principles Curricula,” *Computer Science Teachers Association (CSTA) Conference*, Dallas, TX, July 14, 2015.  
(Co-Panelists: Owen Astrachan, Dan Garcia, Bennett Brown, Ralph Morelli, Nigamanth Sridhar, and Baker Franke).

Panel on “Scaling High School Computer Science: Exploring Computer Science and Computer Science Principles,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 7, 2015.  
(Co-Panelists: Owen Astrachan, Ralph Morelli, Gail Chapman).

Panel on “One-Day Activities for K-12 Face-to-Face Outreach,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 6, 2015.  
(Co-Panelists: Dan Garcia, Wei Ding, Joseph Cohen, Barbara Ericson, Dale Reed).

Panel on “Building and Sustaining Communities of Practice,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 6, 2015.  
(Co-Panelists: Rick Adrion, Padmaja Bandaru, Jen Rosato, Chris Stephenson)

Panel on “Computer Science Principles Curricula: On-the-ground, Adoptable, Adaptable, Approaches to Teaching,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 5, 2015.  
(Co-Panelists: Owen Astrachan, Daniel Garcia, Bradley Beth, Calvin Lin, Ralph Morelli, Bennett Brown, Nigamanth Sridhar, Marie desJardins)

Panel on “Leveraging MOOCs for CSP Professional Development,” *Google CS4HS Hangout on Air*, February 12, 2015.

URL: <https://plus.google.com/u/0/events/c2gvmr6mte6jt50schp109m0h4o>

Panel on “MOOCs for Modeling,” *MODELS Educators Symposium (EduSymp)*, Valencia, Spain, September 29, 2014.  
(Co-Panelists: Friedrich Steimann, Robert France, Gregor Engels)

Panel on “CS Principles Overview,” Google Hangout on Air, April 2, 2014.  
(Co-Panelists: Owen Astrachan, Rich Kick, Deepa Muralidhar)  
URL: <https://plus.google.com/u/0/+GoogleforEducation/posts/8w5oyKo5hXc>

Panel on “CS Principles Professional Development: Only 9,500 to go! Lessons Learned from our CS10K Summer 2013 PD,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Atlanta, GA, March 7, 2014.  
(Co-Panelists: Jan Cuny, Diane Baxter, Dan Garcia, and Ralph Morelli).

Panel on “Diverse Learners, Diverse Courses, Diverse Projects: Learning from Challenges in New Directions,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Atlanta, GA, March 6, 2014.  
(Co-Panelists: Owen Astrachan, Brook Osborne, Irene Lee, and Bradley Beth).

Panel on “How Do We Inspire Students to Model?” *MODELS Educators Symposium (EduSymp)*, Innsbruck, Austria, October 1, 2012.  
(Co-Panelists: Bran Selic, Robert France, Colin Atkinson, Bernd Bruegge, and Jean-Michel Bruel)

Panel on “Creating Domain-Specific Languages,” *ICSE Workshop on Modeling in Software Engineering (MiSE)*, Zurich, Switzerland, June 3, 2012.  
(Co-Panelists: Jordi Cabot, Marian Petre, and Bernhard Rumpe)

Panel on “Modeling and Simulation in K-12 and Higher Education,” *Alabama Simulation Conference*, Huntsville, AL May 3, 2012.

Panel on “CS Principles: Piloting a National Course,” *ACM SIGCSE Conference*, Raleigh, NC, March 2, 2012.

(Co-Panelists: Owen Astrachan, Ralph Morelli, Dwight Barnette, Jeff Gray, Chinma Uche, and Bill Cowles)

Panel on “The Object-Oriented Trivia Show (TOOTS),” *SPLASH/OOPSLA*, Reno, NV, October 19, 2010, (Served as Moderator and Organizer along with Jules White).

Team Participants:

Faculty: Ed Gehringer, James Hill, Laurie Tratt

Industry: Steve Kelly, Bill Opdyke, Markus Völter

Students: Craig Anslow, Philip Langer, Thomas La Toza

Panel on “The OOPSLA Trivia Show (TOOTS),” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Orlando, FL, October 27, 2009, (Served as Moderator and Organizer along with Doug Schmidt).

Team Participants:

Faculty: William Cook, Yuanfang Cai, Phil Greenwood

Industry: Gail Harris, Juha-Pekka Tolvanen, Bill Opdyke

Students: Tomaz Lukman, Damian Dechev, Pooja Varshneya

Panel on “DSLs: The Good, the Bad, and the Ugly,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Nashville, TN, October 22, 2008.

(Served as Panel Chair, with the following co-panelists: Kathleen Fisher, Charles Consel, Tihamer Levendovszky, Marjan Mernik, Juha-Pekka Tolvanen).

Panel on “Evolution and Domain-Specific Modeling,” *OOPSLA Workshop on Domain-Specific Modeling*, Nashville, TN, October 19, 2008. (Served as Panel Chair, with the following co-panelists: Steven Kelly, Laurent Safa, Goren Olsen, Arturo Sanchez).

Panel on “The Future of Aspect Modeling: Will MDD Absorb it?” *Model Driven Engineering Languages and Systems (MODELS)*, Nashville, TN, October 4, 2007.

(Co-Panelists: João Araújo, Jon Whittle, Kevin Sullivan, and Robert France)

Panel on “Abstraction Challenges,” *ICSE Workshop on Modeling in Software Engineering (MiSE)*, Minneapolis, MN, May 19, 2007.

(Co-organized with Jeff Kramer; Panelists included Mats Heimdahl and Brian Berenbach)

Panel on “Generative Programming: Past, present, and future,” *GPCE 2004*, Vancouver, BC, October 27, 2004.

(Co-Panelists: Doug Schmidt, Krzysztof Czarnecki, Don Batory, and Walid Taha)

Panel on “Semantic Foundation for Model Integrated Computing,” *OMG Model-Integrated Computing Workshop*, Washington, DC, October 14, 2004.

(Co-Panelists: Sushil Birla, Janos Sztipanovits, and Gabor Karsai)

Panelist for the session on *Aspects, Components, and Patterns for Infrastructure Software (ACP4IS)* at *AOSD '04: International Conference on Aspect-Oriented Software Development*, Lancaster, UK, March 22-26, 2004.

*Demonstrations* Jake Trower and Jeff Gray, “Blockly Language Creation and Applications: Visual Programming for Media Computation and Bluetooth Robotics Control,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 2015.

Yu Sun, Jeff Gray, and Jules White, "MT-Scribe: An End-User Approach to Automate Software Model Evolution," *International Conference on Software Engineering (ICSE)*, Honolulu, HI, May 2011.

Robert Tairas and Jeff Gray, "Get to Know your Clones with CeDAR," *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Orlando, FL, October 2009.

Yu Sun, Jeff Gray, and Jules White, "MT-Scribe: A Tool for Recording and Inferring Model Transformations," *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Orlando, FL, October 2009.

Robert Tairas, Jeff Gray, and Ira Baxter, "Visualizing Clone Detection Results," *Automated Software Engineering Conference*, Atlanta, GA, November 2007, pp. 549-550.

Jeff Gray and Yuehua Lin, "A Brief Demonstration of C-SAW and DSMDiff," *TOOLS Workshop on Model-Driven Development Tool Implementers Forum*, Zurich, Switzerland, June 2007.

Hui Wu and Jeff Gray, "Testing Domain-Specific Languages in Eclipse," *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, San Diego, CA, October 2005.

Jeff Gray, Suman Roychoudhury, Jing Zhang, and Yuehua Lin, "C-SAW and GenAWeave: A Two-Level Aspect Weaving Toolsuite," *AOSD '05: International Conference on Aspect-Oriented Software Development*, Chicago, IL, March 2005.

Jeff Gray, Ira Baxter, Jing Zhang, and Suman Roychoudhury, "C-SAW and GenAWeave: A Two-Level Aspect Weaving Toolsuite," *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Vancouver, BC, October 2004.

Jeff Gray, Ted Bapty, Sandeep Neema, and Ákos Lédeczi, "A Demonstration of an Aspect Weaver for Domain-Specific Modeling," *First International Conference on Aspect-Oriented Software Development*, Enschede, The Netherlands, April 2002.

*Posters*

Herart Nurue and Jeff Gray, “Extending Unit Test Cases with Graphical Comparison in Blocks-based Programming Languages,” *ACM Conference on International Computing Education Research (ICER)*, Melbourne, Australia, August 2024, pp. 541.

Ziliang Zhang and Jeff Gray, “Enhanced Test Case Expression for End-User Developers,” *ACM Southeast Conference (ACMSE)*, Kennesaw, GA, April 2024, pp. 317-318.

Nicole Ruggiano, Tish Winton, Jane Daquin, Monica Anderson Herzog, Zhe Jiang, and Jeff Gray, “Information Seeking and Technology Use Among Dementia Caregivers: Findings from a Statewide Survey of Diverse Caregivers in the U.S. South,” *Alzheimer’s and Dementia: The Journal of the Alzheimer’s Association (Technology and Dementia Preconference)*, December 2023, volume 19, 2 pages.

Stephen Gregory and Utkarsh Singh (served as advisor on this student poster), “A Computer Vision Pipeline for Automatic Large-Scale Inventory Tracking,” *University of Alabama Undergraduate Research Conference*, April 2021.  
**(First Place, Computer Science Division)**

This poster was also a full paper at the *ACM Southeast Conference*, April 2021.

Kate Sanborn (served as advisor on this student poster), “AirFlute: A Virtual Flute and Tutoring System,” *University of Alabama Undergraduate Research Conference*, April 2021.  
**(Excellence in Research Award, Computer Science Division)**

This poster was also an extended abstract at the *ACM Southeast Conference*, April 2021.

This poster was also presented as a talk at the *ACM Mid-Southeast Conference*, November 2020.  
**(First Place, Undergraduate Division)**

Bryan Whitehurst (served as advisor on this student poster), “BallCaller: A Computer Vision Line Caller for Tennis,” *University of Alabama Undergraduate Research Conference*, April 2021.  
**(Excellence in Research Award, Computer Science Division)**

This poster was also an extended abstract at the *ACM Southeast Conference*, April 2021.  
**(Best Abstract Award)**

Luke Lindsay (served as advisor on this student poster), “HandMap: Identifying Hand Gestures from Demonstrated Training Sets,” *University of Alabama Undergraduate Research Conference*, April 2021.

This poster was also presented as a talk at the *ACM Mid-Southeast Conference*, November 2020.

Emma Seidl (served as mentor on this student science fair poster), “An Investigation in Precipitation Prediction with Machine Learning,” *Regeneron International Science and Engineering Fair (ISEF)*, virtual, May 2021.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2021.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2021.

Maddie Tilford (served as mentor on this student middle school science fair poster), “Moderna Vaccine Temperatures and Security” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2021.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2021.

The same poster was presented at the *University of Alabama STEM Showcase*, Tuscaloosa, AL, February 2021.

Moumita Tabassum, Jeff Gray, and Derrick Smith, “Designing Accessibility into Blocks Languages,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, virtual – Toronto, Canada, March 2021.

Rebecca Odom-Bartel, Carol L. Fletcher, John Owen, Jeff Gray, and Jeremy Zelkowski, “Preparing Pre-Service Teacher Candidates for the Praxis Exam: An Innovative Model of Blended Support,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, virtual - Portland, OR, March 2020.

Jamarri Green (served as mentor on this student science fair poster), “Optimization of Polyhedron Definitions in Text-based CAD Software,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2020.

Jeremy Zelkowski, Rebecca Odom-Bartel, and Jeff Gray, “Building a Pathway for CS Principles Teachers: A Two-course Sequence for Secondary Education Mathematics Pre-service Teachers,” Poster presentation at the *Joint Mathematics Meeting of the Mathematical Association of America and the American Mathematical Society*. Denver, CO, January 2020.

Cary Xiao (served as mentor on this student science fair poster), “Music Accuracy Development through Spectral Analysis (MADSA),” *Intel International Science and Engineering Fair (ISEF)*, Phoenix, AZ, May 2019.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2019.

The same poster was presented at the *Mobile Regional Science Fair*, Mobile, AL, March 2019.

Arrington Harper (served as mentor on this student science fair poster), “Detecting Hate Speech Using Part of Speech Tagging,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2019.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2019.

Aiden Yoder (served as mentor on this student science fair poster), “Modeling and Simulating Environments for Traffic Flow Analysis,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2019.

Mohammed A. Qazi, Jeff Gray, Melody Russell, and David M. Shannon, “ECS4Alabama: A State-Wide Effort to Provide Access to Authentic Computer Science Education in Predominantly Rural and High Minority Schools,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Minneapolis, MN, February 2019.

Jeff Gray, Becky Odom-Bartel, Jeremy Zelkowski, and Karl Hamner, “Building a Pathway for CS Principles Teachers: A Two-Course Sequence for Secondary Education Mathematics Pre-Service Teachers,” Special Session on NSF Research Practice Partnership poster session, *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Minneapolis, MN, February 2019.

Kevin Xiao (served as mentor on this student science fair poster), “Background Noise Reduction By Using Spectral Selection to Remove Unneeded Frequencies,” *Intel International Science and Engineering Fair (ISEF)*, Pittsburgh, PA, May 2018.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2018.

The same poster was presented at the *Mobile Regional Science Fair*, Mobile, AL, March 2018.

Joshua Holland (served as mentor on this student science fair poster), “Extensible Question Based Identification App,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2018.

Blayde Dill (served as advisor on this student poster), “Developing a Blocked Based Language for the Adafruit Circuit Playground,” *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Baltimore, MD, March 2018.

Eric Tilley (served as advisor on this student poster), “Weather Radar Algorithm Development using Google Blockly,” *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Baltimore, MD, March 2018.

Kathy Haynie, Jeff Gray, Sheryl Packman, Carol Crawford, Mary Boehm, and Jonathan Corley, “A Final Project Report on CS4Alabama: A Statewide Professional Development Initiative for CS Principles,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Seattle, WA, March 2017.

Ben Romano (served as advisor on this student poster), “Managing the Internet of Things,” *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Seattle, WA, March 2017.

Nath Tumlin (served as advisor on this student poster), “Teacher Configurable Coding Challenges for Block Languages,” *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Seattle, WA, March 2017.

This poster was also presented at *University of Alabama Undergraduate Research Conference*, April 2017.

Katie Zucker (served as advisor on this student poster), “Automating the Addition of Harp Pedals to Sheet Music,” *University of Alabama Undergraduate Research Conference*, April 2017.

Eric Tilley (served as advisor on this student poster), “Dronely: A Visual Block Programming Language for the Control of Drones,” *University of Alabama Undergraduate Research Conference*, April 2017.

Nick Bucher (served as advisor on this student poster), “A Selection of Best Practices and Design Patterns for Unity,” *University of Alabama Undergraduate Research Conference*, April 2017.

Taimur Ghani (served as mentor on this student science fair poster), “CharacterCreator: An Educational 3D Modeling Application,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2017.

Blayde Dill (served as mentor on this student science fair poster), “CodePlayground: A Block-Based Language Designed for the Adafruit Circuit Playground,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2017.

Joseph Green (served as mentor on this student science fair poster), “KINECT American Sign Translator (KAST),” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2017.

Ryan Kirk (served as mentor on this student science fair poster), “Low-Cost Communication between Controllers using Infrared,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2017.

Jake Trower (served as advisor on this student poster), “Web-based Visual Programming for Media Computation using Blockly,” *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Memphis, TN, March 2016.

Nicholas McCarley (served as advisor on this student poster), “Robotic Navigation through Gesture Based Control,” *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Memphis, TN, March 2016.

This poster was also presented at *University of Alabama Undergraduate Research Conference*, April 2016.

Demarcus Campbell (served as mentor on this student science fair poster), “Creating a Multi-Functional Algorithm for Audio Steganography,” *Intel International Science and Engineering Fair (ISEF)*, Phoenix, AZ, May 2016.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2016.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2016.

Turner Atwood (served as mentor on this student science fair poster), “Using Hand Gestures for Alternative User Verification,” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2016.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2016.

Henry Rice (served as mentor on this student science fair poster), “Multi-Robot System for Cartography in a Variable Area,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2016.

Amber Wagner and Jeff Gray, "Improving the Accessibility of Block-Based Languages," *Blocks and Beyond Workshop*, held at the *IEEE Symposium on Visual Languages and Human-Centric Computing*, Atlanta, GA, October 2015.

Elizabeth Conrad (served as advisor on this student poster), "A Block-Based Programming Environment for Young African American Girls," *University of Alabama Undergraduate Research Conference*, April 2015.

Anthony Timberlake (served as advisor on this student poster), "A Block-Based Programming Environment for Young African American Girls," *University of Alabama Undergraduate Research Conference*, April 2015.

Jacob Zarobsky (served as advisor on this student poster), "Hiding Messages in Audio Files: A Case Study In Steganography," *University of Alabama Undergraduate Research Conference*, April 2015.

Jake Trower and Jeff Gray, "Creating New Languages in Blockly: Two Case Studies in Media Computation and Robotics," *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 2015.

Jeff Gray, Mary Boehm, Carol Crawford, Jeff Baker, Gina McCarley, Kitty Morgan, Kelley Rouze, Jill Westerlund, and Carol Yarbrough, "A Case Study on Adding Computer Science as a Math Graduation Elective: A Report from the Alabama CS/Mathematics Crosswalk Committee," *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 2015.

Matt Bowen (served as advisor on this student poster), "Speed Estimation Using Computer Vision," *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Kansas City, MO, March 2015.

This poster was also presented at *University of Alabama Undergraduate Research Conference*, April 2015.

Christina Noe (served as advisor on this student poster), "Web-based Application for Virtual Exercise Regimen," *ACM Technical Symposium on Computer Science Education (SIGCSE) Student Research Competition*, Kansas City, MO, March 2015.

This poster was also presented at *University of Alabama Undergraduate Research Conference*, April 2015.

Nath Tumlin (served as mentor on this student science fair poster), "The Flying, Spying Pi: An Autonomous Drone for Aerial Imaging and Image Analysis," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2014.

Victor Sui (served as mentor on this student science fair poster), "Stocks@Home: Volunteer Computing and Wall Street," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2015.

Sruti Josyula (served as mentor on this student science fair poster), "Crowdsourcing Diabetes Application," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2015.

Wendy Jiang (served as mentor on this student science fair poster), "Location-Aware Interaction and Indoor Navigation: Using Beacon Technology to Aid Visitors," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2015.



Brian Eddy (served as advisor on this student poster), "Incorporating Structured Queries into Software Search," *SPLASH Student Research Competition (SRC)*, Portland, OR, October 2014, pp. 13-15.

Jonathan Corley and Brian Eddy (served as advisor on this student poster), "Searching for Answers: An Exploratory Study of the Formation, Use, and Impact of Queries During Debugging," *SPLASH Poster Session*, Portland, OR, October 2014, pp. 51-52.

Jonathan Corley (served as mentor on this student poster), "Exploring Omniscient Debugging for Model Transformations" *MODELS Student Research Competition*, Valencia, Spain, October 2014.

Tarif Haque and Chris Chockley (served as advisor on this student poster), "Learning Symbolic Hand and Finger Motion Gestures," *University of Alabama Undergraduate Research Conference*, April 2014.

Jared Beach (served as advisor on this student poster), "Leap Motion Controller Impact On Music and Music Education," *University of Alabama Undergraduate Research Conference*, April 2014.

Nicholas Dahl (served as advisor on this student poster), "Image Steganography," *University of Alabama Undergraduate Research Conference*, April 2014.

Matthew Baird (served as advisor on this student poster), "Using the Pebble Smart Watch to Automate Hospital Care," *University of Alabama Undergraduate Research Conference*, April 2014.

Devin Sun (served as mentor on this student science fair poster), "Control of a Robotic Arm Through Facial Expressions: An Exploration of EEG Technology in Prosthetics," *Alabama Science and Engineering Fair*, Huntsville, AL, April 2014.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2014.

Eric Lienert (served as mentor on this student science fair poster), "Simulation of Genetic Algorithms: Traffic Light Efficiency," *Alabama Science and Engineering Fair*, Huntsville, AL, April 2014.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2014.

Nath Tumlin (served as mentor on this student science fair poster), "Using an EEG Device as a Method of Cursor Navigation for Users with a Motor Disability," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2014.

Desmond Jackson (served as mentor on this student science fair poster), "JScanner: A Java Threat Detector," *Mobile Regional Science Fair*, Mobile, AL, March 2014.

This project was also submitted to the Google Science Fair, 2014.

Brandon Stiene (served as mentor on this student science fair poster), "Image Steganography," *North Alabama Regional Science Fair*, Huntsville, AL, March 2014.

Tytiana Isaac (served as mentor on this student science fair poster), "Mobile Controlled Robotics," *Louisiana Region IV Science & Engineering Fair*, Alexandria, LA, March 2014.

Jeff Gray, Mokter Hossain, Jonathan Corley, Amber Wagner, Cassidy Lamm, Mary Boehm and Carol Crawford, Kathleen Haynie and Sheryl Packman, Deepa Muralidhar, Jeff Baker, Roy Black, Sandy Falgout, Leella Holt, Albert Lilly, Gina McCarley, James Morse, Jennie Rountree, Jill Westerlund, and Carol Yarbrough, "A First-Year Experience Report on a Model for Statewide Deployment of CS Principles Courses," *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Atlanta, GA, March 2014.

Amber Wagner (served as mentor on this student poster), "Myna: Empowering motorically challenged students to program by voice," *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Student Research Competition, Atlanta, GA, March 2014.

Amber Wagner and Jeff Gray, "Observations of First Learners with Different Capabilities," *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Atlanta, GA, March 2014.

Amber Wagner, Jeff Gray, and Jeff Carver, "An Empirical Evaluation of Myna - A Vocal User Interface," *Southeast Women in Computing Conference*, Guntersville, AL, November 2013.

Cassidy Lamm, Lauren Lambert, Joshua Wolfe, and Jeff Gray, "Improving Socialization and Emotion Recognition for Autistic Children Using a Smartphone App," *Southeast Women in Computing Conference*, Guntersville, AL, November 2013.

Songqing Yue (served as advisor on this student poster), "Program Transformation Techniques Applied to Languages Used in High Performance Computing," *SPLASH/OOPSLA Poster*, Indianapolis, IN, October 2013.

Amber Krug (served as advisor on this student poster), "Automation of GUI to VUI Mapping," Doctoral Consortium Poster, *ACM SIGCHI Conference on Human Factors in Computing Systems*, Paris France, April 27-May 2, 2013, 1941-1944.

Tarif Haque and Emily Liang (served as advisor on this student poster), "The Adjustable Grid: A Grid-Based Cursor Control Solution using Speech Recognition," *University of Alabama Undergraduate Research Conference*, April 2013.

Joshua Pepperman (served as advisor on this student poster), "Programming by Voice," *University of Alabama Undergraduate Research Conference*, April 2013.

Johnathan Snyder (served as advisor on this student poster), "Analysis of Mutation Testing Tools," *University of Alabama Undergraduate Research Conference*, April 2013.

Payton Walker (served as mentor on this student science fair poster), "Stay Kinected: A Home Monitoring System Combining Safety and Comfort," *Intel International Science and Engineering Fair (ISEF)*, Phoenix, AZ, May 2013.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2013.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2013.

Casey Barnette (served as mentor on this student science fair poster), “CLIP: An Introduction to Programming,” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2013.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2013.

Yoni Brande (served as mentor on this student science fair poster), “StormPoints: A Simulation of Sensor Node Location Services,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2013.

Justin Timberlake (served as mentor on this student science fair poster), “Manipulating Sound with Java,” *Mobile Regional Science Fair*, Mobile, AL, March 2013.

Neil Windon (served as mentor on this student science fair poster), “Removing Misophonia Trigger Sounds from Audio,” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2013.

The same poster was presented at the *Greater East Alabama Regional Science Fair*, Auburn, AL, March 2013.

Jeff Gray, Mary Boehm, Tammy Dunn, Carol Crawford, and Kathleen Haynie, “A Model for Statewide Deployment of CS Principles Courses,” *NSF CE21 PI Meeting*, Portland, OR, January 2013.

Cassidy Lamm and Lauren Lambert (served as co-advisor on this student poster with Dr. Angela Barber), “Improving Socialization and Emotion Recognition for Autistic Children Using a Smartphone App,” *University of Alabama Undergraduate Research Conference*, April 2012.

Chris Hodapp (served as advisor on this student poster), “An Automated System for Converting App Inventor Apps to Java,” *University of Alabama Undergraduate Research Conference*, April 2012.

Anshu Bansal (served as mentor on this student science fair poster), “Modeling High Volume Networks With Dynamically Assigned Node Structures,” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2012.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2012.

Jeff Gray, Shaundra Daily, J. Michael Wyss, and Shelia Cotten, “Building a K-12 Computing Pipeline in Alabama that Addresses Participation Diversity,” *NSF Showcase at SIGCSE*, Raleigh, NC, March 2012.

Ferosh Jacob, Jeff Gray, and Purushotham Bangalore, “Modulo-X: A Simple Transformation Language for HPC Programs,” *50<sup>th</sup> Annual ACM Southeast Conference*, Tuscaloosa, AL, March 2012, pp. 351-352.

Dalorion Johnson, J. Michael Wyss, Jeff Gray, Shaundra Daily, Alah Shih, and Gypsy Abbott, “Broadening Participation in Computing: The Multi-tiered Approach,” *50<sup>th</sup> Annual ACM Southeast Conference*, Tuscaloosa, AL, March 2012, pp. 371-372.

Jefferson Zou (served as mentor on this student science fair poster), “Mobile Image Analysis,” *Central Alabama Regional Science Fair*, Birmingham, AL, March 2012.

Hyun Cho (served as advisor on this student poster), “A Demonstration-Based Approach for Designing Domain-Specific Modeling Languages,” *OOPSLA Student Research Competition*, Portland, OR, October 2011, pp. 51-54.

Yu Sun (served as advisor on this student poster), “An End-User Demonstration Approach to Support Aspect-Oriented Modeling,” *International Conference on Software Engineering (ICSE)*, Honolulu, HI, May 2011.

Melissa Bowman, Andrea Torske, Elizabeth Williams, and Leah Boling (served as advisor on this student poster), “Digital Eyes,” *University of Alabama Undergraduate Research Conference*, April 2011.

David Shaddix, Blake Bassett, and Chris Hodapp (served as advisor on this student poster), “Campus Tour App,” *University of Alabama Undergraduate Research Conference*, April 2011.

Caitlin Marsh (served as mentor on this student science fair poster), “The Development and Integration of Voice Controlled Software with AgentSheets for Children with Motor Disabilities,” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2011.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2011.

James Yarbrough (served as mentor on this student science fair poster), “A Mobile Computing Crowd Sourcing Application for Reporting Ecological Disasters,” *Alabama Science and Engineering Fair*, Huntsville, AL, April 2011.

The same poster was presented at *I-SWEEEP*, the *International Sustainable World (Energy, Engineering, and Environment) Project Olympiad*, TX, May 2011.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2011.

Ramaraju Rudraraju, Srinivasa Datla, Avishek Banerjee, Mandar Sudame, and Jeff Gray, “Programming by Voice with Scratch,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Dallas, TX, March 2011.

Brittany Stewart, Joel Tully, Joshua Swank, Jeff Gray, and Barrett Bryant, “Analyzing the Similarity of Scratch Programs to Detect Plagiarism,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Dallas, TX, March 2011.

Ferosh Jacob, Jeff Gray, Purushotham Bangalore, and Marjan Mernik, “Refining High Performance FORTRAN Code from Programming Model Dependencies,” *Student Research Symposium - Poster Session*, held at the *17th Annual International Conference on High Performance Computing*, Goa, India, December 2010.

Shelia Cotten, Michael Howell-Moroney, Jeff Gray, David Radford, Thamar Solorio, Mike Wyss, LaToya O’Neal, Karen Harris, Valerie Dennis, Grace Hoomes, Jenelle Ouimette, and Robert Williams, “Integrating Computing Across the Curriculum,” *NSF Discovery K-12 Annual Meeting*, Washington, DC, December 2010.

Ferosh Jacob and Jeff Gray (served as advisor on this student poster), “Extending Abstract GPU APIs to Shared Memory,” *SPLASH/OOPSLA Student Research Competition*, Reno, NV, October 2010. (This poster was a finalist and received 3rd place overall).

Yu Sun and Jeff Gray (served as advisor on this student poster), “Model Scalability Using a Model Recording and Inference Engine,” *SPLASH/OOPSLA Student Research Competition*, Reno, NV, October 2010.

Luka Fürst, Marjan Mernik, Viljan Mahnič, Barrett R. Bryant, Jeff Gray, “Graph Grammars Applied to Metamodels and Flowcharts,” *Workshop on Formalization of Modeling Languages (FML)*, a workshop held at the *European Conference on Object-Oriented Programming (ECOOP)*, Maribor, Slovenia, June 2010.

Jemale Lockett and Omar Ismail (served as mentor on this student science fair poster), “Model-Driven Configuration of Automated Parking Facilities,” *Intel International Science and Engineering Fair (ISEF)*, San Jose, CA. May 2010.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2010.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2010.

Wisdom Chen (served as mentor on this student science fair poster), “Recognition of Sound Sample Sequences Using Waveform Analysis: Detecting Stutter Words in an Audio Stream,” *Intel International Science and Engineering Fair (ISEF)*, San Jose, CA. May 2010.

The same poster was presented at the *Alabama Science and Engineering Fair*, Huntsville, AL, April 2010.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2010.

Robert Tairas and Jeff Gray, “Sub-clones: Considering the Part rather than the Whole,” *ACM Symposium on Applied Computing – Software Engineering Track*, Sierre, Switzerland, March 2010.

Shi-Hsi Liu, Marjan Mernik, Barrett Bryant, and Jeff Gray, “Can Domain-Specific Languages Be Implemented by Service-Oriented Architecture?” *ACM Symposium on Applied Computing – Service-Oriented Architecture and Programming Track*, Sierre, Switzerland, March 2010.

Hyun Cho and Jeff Gray, “Automating the Management of the Traceability Relation,” *Software Engineering Process Group North America Conference* (served as advisor on this student poster), Savannah, GA, March 2010.

J. Michael Wyss, Jeff Gray, John Mayer, David Radford, and Alan Shih, “Aladdin: Alice, Linear Algebra, Dynamic Dimensional Information Network,” *NSF ITEST Annual Meeting*, Washington, DC, February 2010.

Yu Sun and Jeff Gray (served as advisor on this student poster), “Supporting Model Evolution Through Demonstration-based Model Transformation,” *OOPSLA Student Research Competition*, Orlando, FL, October 2009.

Robert Tairas and Jeff Gray (served as advisor on this student poster), “Centralizing Clone Group Representation and Maintenance,” *OOPSLA Student Research Competition*, Orlando, FL, October 2009.

Robert Tairas and Jeff Gray, "Maintaining Clones through Eclipse Refactoring Extensions," *Third OOPSLA Workshop on Refactoring Tools*, Orlando, FL, October 2009.

Ferosh Jacob, Daqing Hou, and Jeff Gray, "CSeR: A Code Editor for Tracking and Highlighting Detailed Clone Differences," *Third OOPSLA Workshop on Refactoring Tools*, Orlando, FL, October 2009.

Qichao Liu, Faizan Javed, Marjan Mernik, Barrett Bryant, Jeff Gray, Alan Sprague, and Dejan Hrnčič, "MARS: Metamodel Recovery from Multi-Tiered Models Using Grammar Inference," *3rd IEEE International Symposium on Theoretical Aspects of Software Engineering*, Tianjin, China, July 2009.

Robert Smyly and Oliver White (served as mentor on this student science fair poster), "Virtual Navigation of Multimedia Maps," *Alabama State Science Fair*, Huntsville, AL, April 2009.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2009.

Hyun Cho (advisor on this student poster), "Using Metaprogramming to Implement a Test Framework," *47<sup>th</sup> ACM Southeast Conference*, Clemson, SC, March 2009.

J. Michael Wyss, Jeff Gray, John Mayer, David Radford, Alan Shih, Dixon Shuttleworth, and Ross Ptacek, "Aladdin: Alice, Linear Algebra, Dynamic Dimensional Information Network," *NSF ITEST Annual Meeting*, Arlington, VA, February 2009.

Robert Smyly (served as mentor on this student science fair poster), "A Visual Designer for Generating Multimedia Simulations," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2008.

J. Michael Wyss, Jeff Gray, John Mayer, David Radford, Alan Shih, "Aladdin: The UAB Alice, Linear Algebra, Dynamic Dimensional Information Network," *NSF ITEST Annual Meeting*, Arlington, VA, February 2008.

Xiaoqing Wu, Barrett R. Bryant, Jeff Gray, and Marjan Mernik (served as co-advisor on this student poster), "A Framework for Component-based Compiler Development," *Programming Language Design and Implementation (PLDI)*, San Diego, CA, June 2007.

William Whitney (served as mentor on this student science fair poster), "An Autonomous Self-Parking Vehicle," *Alabama State Science Fair*, Huntsville, AL, April 2007.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2007.

George Tankersley (served as mentor on this student science fair poster), "Programming by Voice in Alice," *Central Alabama Regional Science Fair*, Birmingham, AL, March 2007.

Yuehua Lin and Jeff Gray (served as advisor on this student poster), "Transformations to Automate Model Change Evolution," *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Portland, OR, October 2006.

Robert Tairas, Jeff Gray, and Ira Baxter, “Visualization of Clone Detection Results,” *Eclipse Technology eXchange (ETX)*, held at *OOPSLA 2006*, Portland, OR, October 2006.

Juha-Pekka Tolvanen, Jeff Gray, and Jonathan Sprinkle, “The 6<sup>th</sup> Workshop on Domain-Specific Visual Languages,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Portland, OR, October 2006.

Jeff Gray, “Increasing Awareness of Computing in Alabama High Schools: Introducing High School Students to Java through Lego Robot Experiments,” *Governor’s Summit on Mathematics and Science Education*, Birmingham, AL, March 2006.

Jerrold Sutton (served as mentor on this student science fair poster), “Robotic Controlled Character Recognition,” *Alabama State Science Fair*, Huntsville, AL, April 2006.

The same poster was presented at the *Central Alabama Regional Science Fair*, Birmingham, AL, March 2006.

Ruben Vuittonet and Jeff Gray, “Tic-Tac-LEGO: An Investigation into Coordinated Robotic Control,” *44<sup>th</sup> ACM Southeast Conference*, Melbourne, FL, March 2006.  
**(Poster Award – 3<sup>rd</sup> Place)**

Yuehua Lin and Jeff Gray, “A Comprehensive Model Transformation Approach to Automated Model Construction and Evolution,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, San Diego, CA, October 2005.

Jing Zhang and Jeff Gray (served as advisor on this student poster), “Metamodel-Driven Model Interpreter Evolution,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, San Diego, CA, October 2005.

Xiaoqing Wu, Barrett R. Bryant, Jeff Gray, and Marjan Mernik (served as co-advisor on this student poster), “Pattern Transformation for Two-Dimensional Separation of Concerns,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, San Diego, CA, October 2005.

Shih-Hsi Liu, Barrett R. Bryant, Jeff Gray, Rajeev R. Raje, Mihran Tuceryan, Andrew M. Olson, and Mikhail Auguston (served as co-advisor on this student poster), “A Software Product Line Architecture for Distributed Real-time and Embedded Systems: A Separation of Concerns Approach,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, San Diego, CA, October 2005.

Hui Wu, Jeff Gray, and Marjan Mernik, “Grammar-Driven Generation of Domain-Specific Language Testing Tools,” *Eclipse Technology eXchange (ETX)*, held at *OOPSLA 2005*, San Diego, CA, October 2005.

Suman Roychoudhury and Jeff Gray (served as advisor on this student poster), “Separating Crosscutting Concerns in Scientific Computing through Program Transformations,” *Aspect-Oriented Software Development Student Poster Extravaganza*, Chicago, IL, March 2005.

Shih-Hsi Liu, Barrett Bryant, Jeff Gray, Rajeev Raje, Andrew Olson, Mikhail Auguston, “Two-Level Assurance of QoS Requirements for Distributed Realtime and Embedded Systems,” *ACM Symposium for Applied Computing (SAC) – Embedded Systems Track*, Santa Fe, NM, March 2005.

Jing Zhang and Jeff Gray (served as advisor on this student poster), “Supporting Software Evolution through Model-Driven Program Transformation,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Vancouver, BC, October 2004.

Suman Roychoudhury and Jeff Gray (served as advisor on this student poster), “A Language-Independent Approach to Software Maintenance Using Grammar Adapters,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Vancouver, BC, October 2004.

Hui Wu, Jeff Gray, and Marjan Mernik, “Debugging Domain-Specific Languages in Eclipse,” *Eclipse Technology eXchange (ETX)*, held at *OOPSLA 2004*, Vancouver, BC, October 2004.

Yuehua Lin, Song Zhou, Chuanxi Xu, Hui Wu, Jing Zhang, Juanqin Wang, Jeff Gray, and Barrett Bryant, “E-R Modeler: A Database Modeling Toolkit for Eclipse,” *Eclipse Technology eXchange (ETX)*, held at *OOPSLA 2003*, Anaheim, CA, October 2003.

Shairaj Shaik, Raymond Corvin, Rajesh Sudarsan, Faizan Javed, Qasim Ijaz, Suman Roychoudhury, Jeff Gray, and Barrett Bryant, “SpeechClipse - An Eclipse Speech Plug-In,” *Eclipse Technology eXchange (ETX)*, held at *OOPSLA 2003*, Anaheim, CA, October 2003.

Beum-Seuk Lee, Xiaoqing Wu, Fei Cao, Shih-hsi Liu, Wei Zhao, Chunmin Yang, Barrett R. Bryant, and Jeffrey G. Gray, “T-Clipse: an Integrated Development Environment for Two-Level Grammar,” *Eclipse Technology eXchange (ETX)*, held at *OOPSLA 2003*, Anaheim, CA, October 2003.

Jeff Gray, Matti Rossi, and Juha-Pekka Tolvanen, “Third OOPSLA Workshop on Domain-Specific Modeling,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Anaheim, CA, October 2003.

Juha-Pekka Tolvanen, Jeff Gray, and Matti Rossi, “Results from the Second Workshop on Domain-Specific Visual Languages,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Seattle, WA, November 2002.

Jeff Gray, Ted Bapty, Sandeep Neema, and James Tuck, “Handling Crosscutting Constraints in Domain-Specific Modeling,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Tampa, FL, October 2001.

Juha-Pekka Tolvanen, Jeff Gray, Steven Kelly, and Kelly Lyytinen, “Domain-Specific Visual Languages,” *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Tampa, FL, October 2001.

#### *Tutorials*

Jeff Gray and Jill Westerlund, “CS Principles: Advanced Track,” *Texas Computer Science Principles Summit*, Austin, TX, February 20-21, 2017.

Jeff Gray and Jill Westerlund, “CS Principles Performance Task Scaffolding,” *Texas Computer Science Principles Summit*, Austin, TX, February 24-25, 2016.

Kathy Perkins and Jeff Gray, “Anyone Can Code: Introduction to Computer Programming Using Code.org,” *Alabama Educational Technology Conference*, Birmingham, AL, June 10, 2015.

Jeff Gray, Fran Trees, and Owen Astrachan, “Infusing Cooperative Learning into Early Computer Science Courses to Support Improved Engagement,” *ACM Technical Symposium on Computer Science Education (SIGCSE)*, Kansas City, MO, March 6,



2015.

Jill Westerlund and Jeff Gray, "Computer Science Principles is STEM Course for All Students," *Alabama-Mississippi Teachers of English to Speakers of Other Languages (AMTESOL)*, Tuscaloosa, AL, January 31, 2015.

Jeff Gray, "Mobile Computing and CS Principles," *Education by Design Conference*, Tuscaloosa, AL, May 9, 2014.

Jeff Gray, Deepa Muralidhar, Lien Diaz, and Tiffany Barnes, "Introducing the new CS Principles Course in K-12 and Higher Education," *52<sup>nd</sup> Annual ACM Southeast Conference*, Atlanta, GA, March 28, 2014.

Jeff Gray, "Computer Science Principles," *Alabama Career and Technical Education Professional Development Conference*, Birmingham, AL, August 8, 2013.

Jeff Gray, "Robotics for Career Tech Courses," *Alabama Career and Technical Education Professional Development Conference*, Birmingham, AL, June 14, 2012.

Jeff Gray, "Computer Science Principles using Smartphones," *Alabama Educational Technology Conference*, Birmingham, AL, June 13, 2012.

Jeff Gray, "Curriculum Suggestions for Teaching an Introductory Robotics Class," *Alabama Educational Technology Conference*, Birmingham, AL, June 13, 2012.

Jeff Gray, "Introducing App Inventor into a CS4HS Workshop," Google Education Hangout, May 17, 2012.

Alan Shih, Jeff Gray, Dalorion Johnson, and J. Michael Wyss, "Learning Programming and Computing Using Alice," *Alabama Simulation Conference*, Huntsville, AL, May 3, 2012.

Jeff Gray, Hal Abelson, David Wolber, and Michelle Friend, "Teaching CS Principles with App Inventor," *50<sup>th</sup> Annual ACM Southeast Conference*, Tuscaloosa, AL, March 29, 2012.

Michelle Friend and Jeff Gray, "CS Outreach with App Inventor," *ACM SIGCSE Conference*, Raleigh, NC, March 2, 2012.

Jeff Gray, "Building Android Smartphone Apps with Google's App Inventor: A Context for Motivating Computer Science," *Alabama Educational Technology Conference*, Birmingham, AL, June 15, 2011.

Jeff Gray, "Computer Science Unplugged: Teaching Fundamental Principles of Computing without a Computer," *Alabama Educational Technology Conference*, Birmingham, AL, June 15, 2011.

Jeff Gray, Jules White, and Aniruddha Gokhale, "Model-Driven Engineering: Raising the Abstraction Level through Domain-Specific Modeling," *48<sup>th</sup> Annual ACM Southeast Conference*, Oxford, MS, April 2010.

Jeff Gray and Cameron McKinley, "Game Programming for Kids? It's Elementary using Alice and Scratch," *Alabama Educational Technology Conference*, Birmingham, AL, June 19, 2008.

Cameron McKinley (Alabama Teacher of the Year) and Jeff Gray, "Game Programming for Kids? It's Elementary using Alice and Scratch" *Alabama Educational Technology Conference*, Birmingham, AL, June 14, 2007.

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Ira Baxter and Jeff Gray, “Automated Program and Model Transformation Technology,” *OMG’s Architecture Design Modernization (ADM) Workshop*, Alexandria, VA, October 2005.

- Doctoral Symposia*      Jeff Gray, "Using Software Component Generators to Construct a Meta-Weaver Framework," *International Conference on Software Engineering (ICSE)*, Toronto, Canada, May 2001.
- Jeff Gray, "A Framework for Creating Aspect Weavers," *Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Tampa, FL, October 2001.
- Ph.D. Dissertation*      Jeffrey G. Gray, *Aspect-Oriented Domain-Specific Modeling: A Generative Approach Using a Metaweaver Framework*, Ph.D. Dissertation, Department of Electrical Engineering and Computer Science, Vanderbilt University, Nashville, TN, March 2002.
- Masters Thesis*      Jeffrey G. Gray, *The Role of Reuse in Introducing Software Engineering Principles in a Computer Science Second Course*, M.S. Thesis, Department of Statistics and Computer Science, West Virginia University, Morgantown, WV, May 1993.

## Professional Activities

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<i>Professional Organization</i>	Chair of the <i>Alabama IEEE Computer Society</i> (2004-Present)
<i>Steering Committees</i>	<p><i>International Conference on Model-Driven Engineering Languages and Systems (MODELS)</i> (2012-present)</p> <p><i>International Conference on Software Language Engineering</i> (2019-present)</p> <p><i>International Conference on Generative Programming: Concepts &amp; Experiences</i> (2019-present)</p> <p><i>International Conference on Model Transformation (ICMT)</i> (2008-present)</p> <p><i>OOPSLA Workshop on Domain-Specific Modeling (DSM)</i> (2001-present)</p> <p><i>Workshop on Models in Software Engineering (MiSE) – held at ICSE</i> (2013-2017)</p> <p><i>Workshop on Model Driven Approaches in System Development (MDASD)</i> (2016-present)</p> <p><i>Workshop on Models and Evolution</i> (2009-2011)</p> <p><i>International Workshop on Aspect-Oriented Modeling</i> (2003-2010)</p>
<i>Editorial Boards</i>	<p><b>Journal Editor</b>            Editor-in-Chief for the <i>Journal of Software and Systems Modeling (SoSym)</i>, 2015-present.            Impact Factor: 1.722</p> <p>Editorial Board for the <i>Journal of Software Testing, Verification and Reliability</i>, 2016-2019            Impact Factor: 1.348</p> <p>Editorial Board for the <i>Journal of Software and Systems Modeling (SoSym)</i>, 2008-2015</p> <p>Editor for <i>The Scientific World Journal (TSWJ)</i>, 2012-2013            Impact Factor: 1.524</p> <p><b>Editorial Advisory Board</b>            Book: <i>Formal and Practical Aspects of Domain-Specific Languages: Recent Developments</i>, (Marjan Mernik, editor), IGI Global, 2012.</p> <p><b>Editorial Advisory Board</b>            Book: <i>Model-Driven Domain Analysis and Software Development: Architectures and Functions</i>, (Janis Osis and Erika Asnina, editors), IGI Global, 2010.</p> <p><b>Editorial Advisory Board</b>            Book: <i>Methodologies for Non-Functional Requirements in Service-Oriented Architecture</i>, (Jun Suzuki, editor), IGI Global, 2009.</p>
<i>External Committees</i>	

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Leicester, UK, July 2023.

**Program Committee**

*Generative Programming and Component Engineering (GPCE)*, Auckland, New Zealand, December 2022.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Montreal, Canada, October 2022.

**Program Committee**

*Workshop on Modeling Language Engineering and Execution (MLE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Montreal, Canada, October 2022.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Montreal, Canada, October 2022.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Montreal, Canada, October 2022.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Nantes, France, June 2022.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, virtual online conference, October 2021.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, virtual online conference, October 2021.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, virtual online conference, October 2021.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *SPLASH/OOPSLA*, Chicago, IL, October 2021.

**Program Committee**

*Generative Programming and Component Engineering (GPCE)*, Chicago, IL, October 2021.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Bergen, Norway, June 2021.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, virtual online conference, October 2020.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, virtual online conference, October 2020.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, virtual online conference, October 2020.

**Organizing Committee (Program Chair)**

*Generative Programming and Component Engineering (GPCE)*, virtual online conference, October 2020.

**Program Committee**

*Software Language Engineering (SLE)*, Chicago, IL, October 2020.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Bergen, Norway, June 2020.

**Demonstrations Selection Committee**

*International Conference on Automated Software Engineering (ICSE)*, Demonstrations Selection Committee, Seoul, South Korea May 2020.

**Organizing Committee (Program co-Chair)**

*Software Language Engineering (SLE)*, Athens, Greece, October 2019.

**Program Board**

*Model-Driven Engineering Languages and Systems (MODELS)*, Munich, Germany, September 2019.

**Doctoral Symposium Committee Member**

*Model-Driven Engineering Languages and Systems (MODELS)*, Munich, Germany, September 2019.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Munich, Germany, September 2019.

**Program Committee**

*Workshop on Flexible MDE (FlexMDE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Munich, Germany, September 2019.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Munich, Germany, September 2019.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Eindhoven, Netherlands, June 2019.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*Workshop on the Globalization of Modeling Languages (GEMOC)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*First Workshop on Debugging in Model-Driven Engineering (MDEbug)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*Workshop on Executable Modeling (EXE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*Workshop on Flexible MDE (FlexMDE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*Workshop on Interplay of Model-Driven and Component-Bases Software Engineering (ModComp)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Copenhagen, Denmark, October 2018.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Toulouse, France, June 2018.

**Program Committee**

*International Conference on Conceptual Modeling (ER)*, Valencia, Spain, November 2017.

**Organizing Committee**

*Workshop on Blocks and Beyond: Lessons and Directions for First Programming Environments*, a workshop held at the *IEEE Symposium on Visual Languages and Human-Centric Computing (VL/*

**Program Committee**

*Software Language Engineering (SLE)*, Vancouver, Canada, October 2017.

**Organizing Committee (Program Chair)**

*Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Workshops Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Organizing Committee**

*Workshop on Executable Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Program Committee**

*Workshop on Interplay of Model-Driven and Component-Bases Software Engineering (ModComp)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Program Committee**

*Workshop on Flexible MDE (FlexMDE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Program Committee**

*First Workshop on Debugging in Model-Driven Engineering (MDEbug)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Program Committee**

*Workshop on the Globalization of Modeling Languages (GEMOC)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Austin, TX, September 2017.

**Program Committee**

*International Conference on Model Transformation (ICMT)*, Marburg, Germany, July 2017.

**Program Committee**

*STAF Doctoral Symposium*, Marburg, Germany, July 2017.

**Program Committee**

*Workshop on Verification Of Model Transformations (VOLT)*, a workshop held at *Software Technologies: Applications and Foundations (STAF)*, Marburg, Germany, July 2017.

**Program Committee**

*Evaluation and Modeling Methods for Systems Analysis and Development (EMMSAD)*, Essen, Germany, June 2017.

**Program Committee**

*The Art, Science, and Engineering of Programming*, Brussels, Belgium, April 2017.

**Workshop Selection Committee**

*SPLASH*, Workshops Selection committee, Amsterdam, Netherlands, October 2016.

**Program Committee**

*Software Language Engineering (SLE)*, Amsterdam, Netherlands, October 2016.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *SPLASH/OOPSLA*, Amsterdam, Netherlands, October 2016.



**Program Committee**

*Generative Programming and Component Engineering (GPCE)*, Amsterdam, Netherlands, October 2016.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Organizing Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, ACM Student Research Competition Chair, Saint-Malo, France, October 2016.

**Organizing Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Publicity co-Chair, Saint-Malo, France, October 2016.

**Doctoral Symposium Committee Member**

*Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Workshops Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Tutorials Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Organizing Committee**

*Workshop on the Globalization of Modeling Languages (GEMOC)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Organizing Committee**

*Workshop on Executable Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Program Committee**

*Workshop on Flexible MDE (FlexMDE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Program Committee**

*Workshop on Verification Of Model Transformations (VOLT)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Program Committee**

*Workshop on Interplay of Model-Driven and Component-Bases Software Engineering (ModComp)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Program Committee**

*Workshop on Patterns in Model Engineering (PAME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Saint-Malo, France, October 2016.

**Demonstrations Selection Committee**

*International Conference on Automated Software Engineering (ICSE)*, Demonstrations Selection Committee, Singapore, September 2016.

**Program Committee**

*1<sup>st</sup> International Workshop on Refactoring (IWor)*, a workshop held at the *Automated Software Engineering Conference (ASE)* Singapore, Singapore, September 2016.

**Program Committee**

*Quality in Model Engineering (QUATIC)*, Lisbon, Portugal, September 2016.

**Program Committee**

*International Conference on Software Engineering and Data Engineering (SEDE)*, Denver, CO, September 2016.

**Program Committee**

*Research in Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)*, Atlanta, GA, August 2016.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Vienna, Austria, July 2016.

**Program Committee**

*Transformation Tool Contest*, Vienna, Austria, July 2016.

**Contest Program Committee**

*International Conference on Software Engineering (ICSE)*, Student Contest On Software Engineering (SCORE), Austin, TX, May 2016.

**Demonstrations Selection Committee**

*International Conference on Software Engineering (ICSE)*, Demonstrations Selection Committee, Austin, TX, May 2016.

**Organizing Committee**

*MobileSoft*, Proceedings Chair, Austin, TX, May 2016.

**Program Committee**

*ACM Student Research Competition Grand Finals*, May 2016.

**Program Committee**

*15<sup>th</sup> International Conference on Modularity*, Malaga, Spain, March 2016.

**Program Committee**

*International Conference on Software Engineering Advances (ICSEA)*, Barcelona, Spain, November 2015.

**Organizing Committee**

*Workshop on Blocks and Beyond: Lessons and Directions for First Programming Environments*, a workshop held at the *IEEE Symposium on Visual Languages and Human-Centric Computing (VL/*

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, October 2015.

**Doctoral Symposium Committee Member**

*Model-Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, October 2015.

**Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Tutorials Selection Committee, Ottawa, Canada, October 2015.

**Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Posters and Demos Selection Committee, Ottawa, Canada, October 2015.

**Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Workshops Selection Committee, Ottawa, Canada, October 2015.

**Organizing Committee**

*Workshop on the Globalization of Modeling Languages (GEMOC)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, October 2015.

**Organizing Committee**

*Workshop on Executable Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, October 2015.

**Program Committee**

*Workshop on Flexible Modeling in MDE (FlexMDE)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, October 2015.

**Program Committee**

*Workshop on Model-Driven Engineering for Component-Based Software Systems (ModComp)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Ottawa, Canada, October 2015.

**Program Committee**

*Software Language Engineering (SLE)*, Pittsburgh, PA, Sweden, October 2015.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *SPLASH/OOPSLA*, Pittsburgh, PA, October 2015.

**Organizing Committee**

*MobileDeli*, a workshop held at *SPLASH*, Pittsburgh, PA, October 2015.

**Program Committee**

*Generative Programming and Component Engineering (GPCE)*, Pittsburgh, PA, October 2015.

**Program Committee**

*Research in Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)*, Charlotte, NC, August 2015.

**Scientific Program Committee**

*Grand Timely Techniques in Software Engineering (GTTSE)*, Braga, Portugal, August 2015.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, L'Aquila, Italy, July 2015.

**Program Committee**

*International Conference on Model Transformation (ICMT)*, L'Aquila, Italy, July 2015.

**Program Committee**

*Tool Transformation Contest*, L'Aquila, Italy, July 2015.

**Program Committee**

*BigMDE*, L'Aquila, Italy, July 2015.

**Program Committee**

*17<sup>th</sup> International Symposium on Practical Aspects of Declarative Languages (PADL)*, Portland, OR, June 2015.

**Reviewing Committee**

*International Conference on Software Engineering (ICSE)*, Florence, Italy, May 2015.

**Steering and Organizing Committee**

*Seventh International Workshop on Modeling in Software Engineering (MiSE)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Florence, Italy, May 2014.

**Program Committee**

*Evaluation of Novel Approaches to Software Engineering (ENASE)*, Barcelona, Spain, April 2015.

**Organizing Committee**

*11th International Conference on Modularity*, ACM Student Research Competition Chair, Fort Collins, CO, March 2015.

**Organizing Committee**

*First International workshop on Next Generation of Modularity Approaches for Multiple Dimensions of Sustainability (Sustainability'15)*, a workshop held at *11th International Conference on Modularity*, Fort Collins, CO, March 2015.

**Program Committee**

*Ninth International Workshop on Variability Modeling of Software-Intensive Systems (VaMoS)*, Hildesheim, Germany, January 2015.

**Program Committee**

*8th International Conference on Bio-inspired Information and Communications Technologies (BICT)*, Boston, MA, December 2014.

**Program Committee**

*Second International Workshop on Software Development Lifecycle for Mobile (DeMobile)*, a workshop held at *Foundations of Software Engineering (FSE)*, Hong Kong, November 2014.

**Program Committee**

*Fourth International Workshop on Domain-Specific Languages and High-Level Frameworks for High Performance Computing (WOLFHPC)*, held at SC 2014, New Orleans, LA, November 2014.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at SPLASH/OOPSLA, Portland, OR, October 2014.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Demonstrations Selection Committee, Valencia, Spain, October 2014.

**Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Workshops Selection Committee, Valencia, Spain, October 2014.

**Program Committee**

*Workshop on Extreme Modeling (XM)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Program Committee**

*Workshop on Model-Driven Engineering for Component-Based Software Systems (ModComp)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Program Committee**

*Workshop on Models and Evolution (ME)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Program Committee**

*Workshop on the Globalization of Modeling Languages (GEMOC)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Program Committee**

*Workshop on Combining Modelling with Search- and Example-Based Approaches (CMSEBA)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Program Committee**

*Towards the Model Driven Organization (AMINO)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Valencia, Spain, October 2014.

**Program Committee**

*Generative Programming and Component Engineering (GPCE)*, Västerås, Sweden, September 2014.

**Program Committee**

*Workshop on Model-Driven Approaches in System Development (MDASD)*, a workshop held at the *Federated Conference on Computer Science and Information Systems (FedCSIS)*, Warsaw, Poland, September 2014.

**Program Committee**

*Quality in Model-Driven Engineering*, a thematic track at the *International Conference on the Quality of Information and Communications Technology (QUATIC)*, Guimares, Portugal, September 2014.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, York, UK, July 2014.

**Planning Committee**

*Computer Science Teachers Association (CSTA) Annual Conference – CS Principles Course Sessions*, Chicago, IL, July 2014.

**Steering Committee and Program Committee**

*International Conference on Model Transformation (ICMT)*, York, UK, July 2014.

**Program Committee**

*Workshop on Verification Of model Transformations (VOLT)*, a workshop held at the *Conferences on Software Technologies: Applications and Foundations (STAF)*, York, UK, July 2014.

**Program Committee**

*Transformation Tool Contest*, Budapest, Hungary, July 2014.

**Program Committee**

*Australasian Software Engineering Conference (ASWEC)*, Melbourne, Australia, June 2014.

**Program Committee**

*First International Conference on Mobile Software Engineering and Systems (MOBILESoft)*, Hyderabad, India, June 2014.

**Steering and Program Committee**

*Sixth International Workshop on Modeling in Software Engineering (MiSE)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Hyderabad, India, June 2014.

**Organizing Committee**

*International Workshop on Engineering Mobile-Enabled Systems (MOBS)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Hyderabad, India, June 2014. Please note: This workshop was cancelled due to low submissions.

**Program Committee**

*Workshop on the Design, Modeling and Evaluation of Cyber Physical Systems (CyPhy)*, Berlin, Germany, April 2014.

**Session Chair and Program Committee**

*52<sup>nd</sup> Annual ACM Southeast Conference*, Atlanta, GA, April 2014.

**Session Discussion Leader**

*NSF CE21 Principal Investigators Meeting*, CS Principles Session, Orlando, FL, January 2014.

**Program Committee**

*Eighth International Workshop on Variability Modeling of Software-Intensive Systems (VaMoS)*, Nice, France, January 2014.

**Organizing Committee**

*International Workshop on Modeling and Evaluation of Middleware Systems (MEMS)*, a workshop held at Middleware, Beijing, China, December 2013.

**Program Committee**

*Workshop on Domain-Specific Languages and Models for Robotics Systems*, Tokyo, Japan, November 2013.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at SPLASH/OOPSLA, Indianapolis, IN, October 2013.

**Organizing Committee (co-Chair)**

*Model-Driven Engineering Languages and Systems (MODELS)*, Conference co-Chair, Miami, FL, September/October 2013.

**Program Committee**

*Extreme Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Miami, FL, September 2013.

**Program Committee**

*Analysis of Model Transformations*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Miami, FL, September 2013.

**Program Committee**

*Model-Driven Engineering By Example*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Miami, FL, September 2013.

**Program Committee**

*The Globalization of Modeling Languages (GEMOC)*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Miami, FL, September 2013.

**Program Committee**

*Non-functional System Properties in Modeling – Analysis, Languages, and Processes*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Miami, FL, September 2013.

**Program Committee**

*Software Language Engineering (SLE)*, Indianapolis, IN, October 2013.

**Program Committee**

*IEEE Symposium on Visual Languages and Human-Centric Computing*, San Jose, CA, September 2013.

**Program Committee**

*First International Workshop on Software Development Lifecycle for Mobile (DeMobile)*, a workshop held at *European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE)*, St. Petersburg, Russia, August 2013.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Montpellier, France, July 2013.

**Program Committee**

*Graphical Modeling Language Development (GMLD)*, a workshop held at the *European Conference on Modeling Foundations and Applications (ECMFA)*, Montpellier, France, July 2013.

**Program Committee**

*First International Workshop on The Globalization of Domain Specific Languages (GlobalDSL)*, a workshop held at the *European Conference on Modeling Foundations and Applications (ECMFA)*, Montpellier, France, July 2013.

**Program Committee**

*First Academics Tooling with Eclipse Workshop (ACME)*, a workshop held at the *European Conference on Modeling Foundations and Applications (ECMFA)*, Montpellier, France, July 2013.

**Steering Committee and Program Committee**

*International Conference on Model Transformation (ICMT)*, Budapest, Hungary, June 2013.

**Program Committee**

*Workshop on Verification Of model Transformations (VOLT)*, a workshop held at the *International Conference on Model Transformation (ICMT)*, Budapest, Hungary, June 2013.

**Organizing Committee**

*International Conference on Software Engineering (ICSE)*, Demonstrations co-Chair, San Francisco, CA, May 2013.

**Organizing Committee**

*Fifth International Workshop on Modeling in Software Engineering (MiSE)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, San Francisco, CA, May 2013.

**Organizing Committee**

*International Workshop on Engineering Mobile-Enabled Systems (MOBS)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, San Francisco, CA, May 2013.

**Program Committee**

*Workshop on Collaboration in Virtual Environments (CoVE)*, a workshop held at the *International Conference on Collaboration Technologies and Systems (CTS)*, San Diego, CA, May 2013.

**Program Committee**

*51<sup>st</sup> Annual ACM Southeast Conference*, Savannah, GA, April 2013.

**Program Committee**

*Aspect-Oriented Software Development (AOSD)*, Fukuoka, Japan, March 2013.

**Program Committee**

*Fourth International Workshop on Variability and Composition (VariComp)*, Fukuoka, Japan, March 2013.

**Program Committee**

*Seventh International Workshop on Variability Modeling of Software-Intensive Systems (VaMoS)*, Pisa, Italy, January 2013.



**Program Committee**

*Workshop on Domain-Specific Languages and Models for Robotics Systems*, Tsukuba, Japan, November 2012.

**Workshop Selection Committee**

*SPLASH/Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Tucson, AZ, October 2012.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *SPLASH/OOPSLA*, Tucson, AZ, October 2012.

**Organizing Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Workshops Chair, Innsbruck, Austria, October 2012.

**Program Committee and Session Chair**

*Model-Driven Engineering Languages and Systems (MODELS)*, Innsbruck, Austria, October 2012.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Innsbruck, Austria, October 2012.

**Program Committee**

*Multi-Paradigm Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Innsbruck, Austria, October 2012.

**Program Committee**

*Extreme Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Innsbruck, Austria, October 2012.

**Program Committee**

*Analysis of Model Transformations*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Innsbruck, Austria, October 2012.

**Program Committee**

*IEEE Symposium on Visual Languages and Human-Centric Computing*, Innsbruck, Austria, September/October 2012.

**Program Committee**

*National Outreach Scholarship Conference (NOSC)*, Tuscaloosa, AL, October 2012.

**Program Committee**

*Software Language Engineering (SLE)*, Dresden, Germany, September 2012.

**Program Committee**

*International Workshop on Feature-Oriented Software Development (FOSD)*, Dresden, Germany, September 2012.

**Program Committee**

*Workshop on Model-Driven Approaches in System Development (MDASD)*, a workshop held at the *Federated Conference on Computer Science and Information Systems (FedCSIS)*, Wroclaw, Poland, September 2012.

**Program Committee**

*European Conference on Modeling Foundations and Applications (ECMFA)*, Lyngby, Denmark, July 2012.

**Program Committee**

*Graphical Modeling Language Development (GMLD)*, a workshop held at the *European Conference on Modeling Foundations and Applications (ECMFA)*, Lyngby, Denmark, July 2012.

**Program Committee**

*International Workshop on Model Comparison in Practice (IWMCP)*, a workshop held at *TOOLS Europe*, Prague, Czech Republic, June 2012.

**Program Committee**

*Reflection, AOP and Meta-Data for SW Evolution (RAM-SE)*, Beijing, China, June 2012.

**Program Committee**

*Evaluation of Novel Approaches to Software Engineering (ENASE)*, Wroclaw, Poland, June 2012.

**Program Committee**

*International Workshop on Model-Driven Architecture and Modeling-Driven Software Development (MDA&MDSD)*, a workshop held at *Evaluation of Novel Approaches to Software Engineering (ENASE)*, Wroclaw, Poland, June 2012.

**Program Committee**

*Workshop on Domain Engineering*, a workshop held at the *International Conference on Advanced Information Systems (CAiSE)*, Gdańsk, Poland, June 2012.

**Program Committee**

*Software Composition*, Prague, Czech Republic, May-June 2012.

**Program Committee**

*Workshop on Software Engineering for Embedded Systems (SEES)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Zurich, Switzerland, June 2012.

**Program Committee and Session Chair**

*Workshop on Modeling in Software Engineering (MiSE)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Zurich, Switzerland, June 2012.

**Program Committee**

*Collaboration in Virtual Environments (CoVE)*, a workshop held at the *International Conference on Collaboration Systems (CTS)*, Denver, CO, May 2012.

**Program Committee**

*Workshop on Verification Of model Transformations (VOLT)*, a workshop held at the *International Conference on Software Testing, Verification, and Validation (ICST)*, Montreal, Canada, April 2012.

**Program Committee**

*Workshop on Language Descriptions, Tools, and Applications (LDTA)*, a workshop held at the *European Joint Conferences on Theory and Practice of Software (ETAPS)*, Tallinn, Estonia, March 2012.

**Program Committee**

*Third International Workshop on Variability and Composition (VariComp)*, Potsdam, Germany, March 2012.

**Session Chair**

*ACM SIGCSE Conference*, Raleigh, NC March 2012.

**Birds of a Feather Organizer**

*Building Partnerships Across the CS Education Spectrum*, a BoF at the *ACM SIGCSE Conference*, Raleigh, NC March 2012.

With Chris Stephenson, Steve Cooper, and Don Yanek

**Birds of a Feather Organizer**

*Teaching with App Inventor for Android*, a BoF at the *ACM SIGCSE Conference*, Raleigh, NC March 2012.

With Hal Abelson, David Wolber, Ralph Morelli, and Chinma Uche

**Program Committee**

*Sixth International Workshop on Variability Modeling of Software-Intensive Systems (VaMoS)*, Leipzig, Germany January 2012.

**Program Committee**

*Automated Software Engineering*, Tool Demonstration PC, Lawrence, Kansas, November 2011.

**Program Committee and Session Chair**

*Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Portland, OR, October 2011.

**Workshop Selection Committee**

*SPLASH/Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Portland, OR, October 2011.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *SPLASH/OOPSLA*, Portland, OR, October 2011.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Wellington, New Zealand, October 2011.

**Workshop Selection Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Wellington, New Zealand, October 2011.

**Program Committee**

*Models@Run.Time*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Wellington, New Zealand, October 2011.

**Program Committee**

*Multi-Paradigm Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Wellington, New Zealand, October 2011.

**Program Committee**

*International Conference on Embedded and Ubiquitous Computing (EUC)*, Melbourne, Australia, October 2011.

**Program Committee**

*Workshop on Domain-Specific Languages and Models for Robotics Systems*, San Francisco, CA, September 2011.

**Program Committee**

*International Workshop on Feature-Oriented Software Development (FOSD)*, Munich, Germany, August 2011.

**Program Committee**

*Software Language Engineering (SLE)*, Braga, Portugal, July 2011.

**Scientific Committee**

*Generative and Transformational Techniques in Software Engineering (GTTSE)*, Braga, Portugal, July 2011.

**Program Committee**

*International Conference on Software Engineering and Knowledge Engineering (SEKE)*, Miami Beach, FL, July 2011.

**Program Committee**

*International Workshop on Model Transformation with ATL (MtATL)*, a workshop held at the *International Conference on Model Transformation*, Zurich, Switzerland, July 2011.

**Program Committee**

*International Workshop on Model Comparison in Practice (IWMCP)*, a workshop held at *TOOLS Europe*, Zurich, Switzerland, July 2011.

**Program Committee**

*TOOLS Europe*, Zurich, Switzerland, June-July 2011.

**Program Committee**

*Software Composition*, Zurich, Switzerland, June-July 2011.

**Program Committee**

*International Workshop on Model-Driven Architecture and Modeling-Driven Software Development - MDA & MDSD*, a workshop held at *Evaluation of Novel Approaches to Software Engineering (ENASE)*, Beijing, China, June 2011.

**Program Committee**

*Evaluation of Novel Approaches to Software Engineering (ENASE)*, Beijing, China, June 2011.

**Organizing Committee**

*SmartPhones in the Curriculum Workshop*, a workshop held at the *24th IEEE Conference on Software Engineering Education and Training (CSEET)*, Waikiki, Honolulu, Hawaii, May 2011.

**Program Committee**

*Aspect-Oriented Software Development (AOSD)*, Porto de Galinhas, Pernambuco, Brazil, March 2011.

**Program Committee**

*Workshop on Domain Engineering*, a workshop held at the *International Conference on Conceptual Modeling (ER)*, Vancouver, CA, November 2010.

**Organizing Committee**

*SPLASH/Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Workshops Chair, Reno, NV, October 2010.

**Program Committee and Session Chair**

*Onward!*, Reno, NV, October 2010.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Organizing Committee**

*Aspect-Oriented Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Program Committee**

*Model-Driven Interoperability*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Program Committee**

*Models@Run.Time*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Program Committee**

*Multi-Paradigm Modeling*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Doctoral Symposium Committee Member**

*Doctoral Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Oslo, Norway, October 2010.

**Program Committee**

*Software Language Engineering (SLE)*, Eindhoven, Netherlands, October 2010.

**Doctoral Symposium Committee Member**

*Software Language Engineering (SLE)*, Eindhoven, Netherlands, October 2010.

**Program Committee**

*Visual Environments, Languages, and Tools for Software Engineering (VELT-SE)*, a session held at the *Workshop on Visual Languages and Computing (VLC)*, Oak Brook, IL, October 2010.

**Organizing Committee**

*Workshop on Assessment of Contemporary Modularization Techniques: Assessing Modularity Techniques for Software Product Lines*, a workshop held at the *International Software Product Line Conference*, September 2010, Jeju Island, South Korea.

**Program Committee**

*Automated Software Engineering*, Tool Demonstration PC, Antwerp, Belgium, September 2010.

**Program Committee**

*Software Composition*, Malaga, Spain, July 2010.

**Program Committee and Session Chair**

*TOOLS Europe*, Malaga, Spain, July 2010.

**Program Committee**

*International Workshop on Model Comparison in Practice (IWMCP)*, a workshop held at the *International Conference on Model Transformation*, Malaga, Spain, July 2010.

**Program Committee**

*International Workshop on Model Transformation with ATL (MtATL)*, a workshop held at the *International Conference on Model Transformation*, Malaga, Spain, July 2010.

**Session Chair**

*International Conference on Model Transformation (ICMT)*, Malaga, Spain, July 2010.

**Program Committee**

*International Conference on Software Engineering and Knowledge Engineering (SEKE)*, San Francisco, CA, July 2010.

**Organizing Committee**

*Workshop on Formalization of Modeling Languages (FML)*, a workshop held at the *European Conference on Object-Oriented Programming (ECOOP)*, Maribor, Slovenia, June 2010.

**Program Committee**

*Workshop on Domain Engineering*, a workshop held at the *International Conference on Advanced Information Systems (CAiSE)*, Hammamet, Tunisia, June 2010.

**Program Committee**

*48<sup>th</sup> Annual ACM Southeast Conference*, Oxford, MS, April 2010.

**Program Committee**

*Aspect-Oriented Software Development*, Rennes, France, March 2010.

**Program Committee**

*Workshop on Composition: Objects, Aspects, Components, Services, and Product Lines*, a workshop held at *Aspect-Oriented Software Development*, Rennes, France, March 2010.

**Program Committee**

*Workshop on Meta-Aspects*, a workshop held at *Aspect-Oriented Software Development*, Rennes, France, March 2010.

**Program Committee**

*International Conference on Service-Oriented Computing*, Stockholm, Sweden, November 2009.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *OOPSLA*, Orlando, FL, October 2009.

**Organizing Committee (Program co-Chair)**

*Software Language Engineering (SLE)*, Denver, CO, October 2009.

**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Denver, CO, October 2009.

**Organizing Committee**

*14th International Workshop on Aspect-Oriented Modeling*, a workshop held at *MODELS*, Denver CO, October 2009.

**Program and Steering Committees**

*Models and Evolution*, a workshop held at *MODELS*, Denver CO, October 2009.

**Program Committee**

*Models@Run.Time*, a workshop held at *MODELS*, October 2009, Denver, CO, October 2009.

**Program Committee**

*Educators Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Denver, CO, October 2009.

**Doctoral Symposium Committee Member**

*Doctoral Symposium*, a workshop held at *Model-Driven Engineering Languages and Systems (MODELS)*, Denver, CO, October 2009.

**Program Committee**

*IEEE Symposium on Visual Languages and Human-Centric Computing*, Corvallis, OR, September 2009.

**Program Committee**

*Workshop on Visual Languages and Environments in Software Engineering (VLE-SE)*, a workshop held at the *International Conference on Distributed Multimedia Systems (DMS)*, San Francisco, CA, September 2009.

**Program Committee**

*International Workshop on Open Component Ecosystems (IWOCE)*, a workshop held at the *European Software Engineering Conference/Foundations of Software Engineering (ESEC/FSE)*, Amsterdam, The Netherlands, August 2009.

**Steering Committee and Program Committee**

*International Conference on Model Transformation (ICMT)*, Zurich, Switzerland, July 2009.

**Program Committee**

*TOOLS Europe*, Zurich, Switzerland, July 2009.

**Program Committee**

*IFIP Working Conference on Domain Specific Languages (DSL WC)*, Oxford, England, July 2009.

**Scientific Committee**

*Generative and Transformational Techniques in Software Engineering (GTTSE)*, Braga, Portugal, July 2009.

**Program Committee**

*International Workshop of Software Engineering for Adaptive Service-oriented Systems (SEASS)*, a workshop held at the *World Congress on Services (SERVICES)*, Los Angeles, CA, July 2009.

**Program Committee**

*Workshop on Domain Engineering*, a workshop held at the *International Conference on Advanced Information Systems (CAiSE)*, Amsterdam, The Netherlands, June 2009.

**Program Committee**

*2nd International Workshop on Cyber-Physical Systems*, a workshop held at the *International Conference on Distributed Computing*, Montreal, Canada, June 2009.

**Program Committee**

*Workshop on Modeling in Software Engineering (MiSE)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Vancouver, Canada, May 2009.

**Program Committee**

*First International Workshop on Domain Engineering*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Vancouver, Canada, May 2009.

**Program Committee**

*6th International Conference on Information Technology: New Generations, Special Track on Software Specification and Modeling: Techniques, Tools, and Applications*, Las Vegas, NV, April 2009.

**Organizing Chair**

*Aspect-Oriented Software Development*, Charlottesville, VA, March 2009.

**Organizing Committee**

*13th International Workshop on Aspect-Oriented Modeling*, a workshop held at *AOSD*, Charlottesville, VA, March 2009.

**Program Committee**

*Human-Computer Interaction*, a track at the 24<sup>th</sup> annual *ACM Symposium on Applied Computing (SAC)*, Honolulu, HI, March 2009.

**Program Committee**

*Symposium on Practical Applications of Declarative Languages (PADL)*, a co-located event at the *Symposium on Principles of Programming Languages (POPL)*, Savannah, GA, January 2009.

**Program Committee**

*Distributed Objects, Middleware, and Applications (DOA)*, Monterey, Mexico, November 2008.

**Program Committee and Session Chair**

*Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*, Nashville, TN, October 2008.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *OOPSLA*, Nashville, TN, October 2008.

**Program Committee**

*Modularization, Composition and Generative Techniques for Product Line Engineering (McGPLe)*, a workshop held at *GPCE*, Nashville, TN, October 2008.

**Expert Review Panel**

*Model-Driven Engineering Languages and Systems (MODELS)*, Toulouse, France, October 2008.



**Program Committee**

*Model-Driven Engineering Languages and Systems (MODELS)*, Tutorials Selection Committee, Toulouse, France, October 2008.

**Organizing Committee**

*First International Workshop on Model Co-Evolution and Consistency Management*, a workshop held at *MODELS*, October 2008, Toulouse, France, October 2008.

**Program Committee**

*Models@Run.Time*, a workshop held at *MODELS*, October 2008, Toulouse, France, October 2008.

**Program Committee**

*Software Language Engineering (SLE)*, Toulouse, France, October 2008.

**Program Committee**

*IEEE Symposium on Visual Languages and Human-Centric Computing*, Herrsching am Ammersee, Germany, September 2008.

**Program Committee**

*Early Aspects*, a workshop held at the *Software Product Line Conference (SPLC)*, Limerick, Ireland, September 2008.

**Program Committee**

*International Workshop on Coordination of Domain-Specific Languages (CDSL)*, a workshop held at the *International Conference on Automated Software Engineering (ASE)*, L'Aquila, Italy, September 2008.

**Program Committee**

*International Workshop on Models and Model-driven Methods for Enterprise Computing (3M4EC)*, a workshop held at the *Twelfth IEEE International EDOC Conference*, Munchen, Germany, September 2008.

**Organizing Committee (Program Co-Chair)**

*International Conference on Model Transformation (ICMT)*, Zurich, Switzerland, July 2008.

**Program Committee**

*TOOLS Europe*, Zurich, Switzerland, July 2008.

**Organizing Committee**

*Model-Based Software Engineering (MBSE)*, a special session of *SEKE*, San Francisco, CA, July 2008.

**Program Committee**

*Software Architecture Research and Practice*, a session held at the *International Conference on Digital Telecommunications*, Bucharest, Romania, July 2008.

**Program Committee**

*First IEEE International Workshop on Model-Driven Development of Autonomic Systems (MDDAS)*, a workshop held at the *IEEE Computer Software and Applications Conference (COMPSAC)*, Turku, Finland, July/August 2008.

**Program Committee**

*Ninth International Conference on Rule-Based Programming (RULE)*, a workshop held at the *International Conference on Rewriting Technologies and Applications (RTA)*, Hagenberg, Austria, July 2008.

**Program Committee**

*World Conference on Integrated Design and Process Technology*, Taichung, Taiwan, June 2008.

**Program Committee**

*First International Workshop on Cyber-Physical Systems*, a workshop held at the *International Conference on Distributed Computing Systems (ICDCS)*, Beijing, China, June 2008.

**Program Committee**

*Model-Driven Enterprise Information Systems (MDEIS)*, a workshop held at the 10<sup>th</sup> *International Conference on Enterprise Information Systems (ICEIS)*, Barcelona, Spain, June 2008.

**Program Committee**

*European Conference on Model-Driven Architecture - Foundations and Applications (ECMDA)*, Berlin, Germany, June 2008.

**Program Committee**

*Modeling in Software Engineering*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Leipzig, Germany, May 2008.

**Program Committee**

*3rd Workshop on Graph and Model Transformation (GraMoT)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Leipzig, Germany, May 2008.

**Program Committee**

*Aspect-Oriented Software Development*, Brussels, Belgium, April 2008.

**Organizing Committee**

*12th International Workshop on Aspect-Oriented Modeling*, a workshop held at *AOSD*, Brussels, Belgium, April 2008.

**Program Committee**

*7th International Workshop on Aspects, Components, and Patterns for Infrastructure Software (ACP4IS)*, a workshop held at *AOSD*, Brussels, Belgium, April 2008.

**Program Committee**

*Early Aspects*, a workshop held at *AOSD*, Brussels, Belgium, April 2008.

**Program Committee**

*5th International Conference on Information Technology: New Generations, Special Track on Software Specification and Modeling: Techniques, Tools, and Applications*, Las Vegas, NV, April 2008.

**Program Committee**

*46th ACM Southeast Conference*, Auburn, AL, March 2008.

**Program Committee**

*International Symposium on Distributed Objects and Applications (DOA)*, Iberian Peninsula and Islands, October/November 2007.

**Student Research Paper Judge and Session Chair**

*ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2007.

**Organizing Committee**

*Workshop on Automating Service Quality (WRASQ)*, a workshop held at ASE, Atlanta, GA, November 2007.

**Organizing Committee**

*Model-Driven Engineering Languages and Systems (MoDELS)*, Tutorials Chair, Nashville, TN, October 2007.

**Organizing Committee**

*11th International Workshop on Aspect-Oriented Modeling*, a workshop held at MODELS, Nashville, TN, October 2007.

**Program Committee and Session Chair**

*International Workshop on Meta-models, Schemas and Grammars and Ontologies for Reverse Engineering*, a workshop held at MODELS, Nashville, TN, October 2007.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at OOPSLA, Montreal, Canada, October 2007.

**Program Committee**

*Second Workshop on Aspect-Oriented Product Line Engineering*, a workshop held at GPCE, Salzburg, Austria, October 2007.

**Program Committee**

*Fourth Brazilian Workshop on Aspect-Oriented Software Development (WASP '07)*, Joao Pessoa, Brasil, October 2007.

**Program Committee**

*The First International Workshop on Software Architecture Research and Practice*, a workshop held at the *International Conference on Digital Telecommunications*, San Jose, CA, July 2007.

**Scientific Committee**

*Generative and Transformational Techniques in Software Engineering (GTTSE)*, Braga, Portugal, July 2007.

**Program Committee**

*Software Engineering for Adaptive Software Systems (SEASS)*, a workshop held at COMPSAC, Beijing, China, July 2007.

**Program Committee**

*TOOLS Europe*, Zurich, Switzerland, June 2007.

**Organizing Committee**

*Model-Driven Development Tool Implementers Forum (MDD-TIF)*, a workshop held at TOOLS Europe, Zurich, Switzerland, June 2007.

**Program Committee**

*Tower of Models Workshop*, a workshop held at TOOLS Europe, Zurich, Switzerland, June 2007.

**Program Committee**

*Model-Driven Enterprise Information Systems (MDEIS)*, a workshop held at the 9<sup>th</sup> *International Conference on Enterprise Information Systems (ICEIS)*, Madeira Island, Portugal, June 2007.

**Program Committee**

*European Conference on Model-Driven Architecture - Foundations and Applications (ECMDA-FA)*, Haifa, Israel, June 2007.

**Program Committee**

*RULE*, a workshop held at the *Federated Conference on Rewriting, Deduction, and Programming (RDP)*, Paris, France, June 2007.

**Program Committee**

*European Conference on Model Driven Architecture Foundations and Applications*, Haifa, Israel, June 2007.

**Program Committee**

*Workshop on Modeling in Software Engineering (MiSE)*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Minneapolis, MN, May 2007.

**Organizing Committee**

*Model Transformations*, a track at the 22<sup>nd</sup> annual *ACM Symposium on Applied Computing (SAC)*, Seoul, Korea, March 2007.

**Organizing Committee**

*10th International Workshop on Aspect-Oriented Modeling*, a workshop held at *AOSD*, Vancouver, BC, March 2007.

**Program Committee**

*Object-Oriented Programming Languages and Systems*, a track at the 22<sup>nd</sup> annual *ACM Symposium on Applied Computing (SAC)*, Seoul, Korea, March 2007.

**Program Committee**

*Model-Based Design for Embedded Systems*, a workshop held at *Design Automation and Test in Europe*, Nice, France, March 2007.

**Program Committee**

*10<sup>th</sup> International Workshop on Early Aspects*, a workshop held at the *International Conference on Aspect-Oriented Software Development*, Vancouver, BC, March 2007.

**Organizing Committee**

*Adaptive and Evolvable Software Systems*, a mini-track to the Software Technology Track for HICSS-40, Big Island, HI, January 2007.

**Program Committee**

*Components for Embedded and Real-Time Systems*, a mini-track to the Software Technology Track for HICSS-40, Big Island, HI, January 2007.

**Program Committee**

*MModel Driven Development for Middleware (MODDM)*, a workshop held at the *Middleware* conference, Melbourne, Australia, November/December 2006.

**Student Research Paper Judge and Session Chair**

*ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2006.

**Student Research Paper Judge**

*Consortium for Computer Sciences in Colleges*, Nashville TN, October 2006.

**Program Committee and Session Chair**

*Generative Programming and Component Engineering (GPCE)*, Portland, OR, October 2006.

**Organizing Committee**

*Generative Programming and Component Engineering for QoS Provisioning in Distributed Systems*, a workshop held at *GPCE*, Portland, OR, October 2006.

**Program Committee**

*First Workshop on Aspect-Oriented Product Line Engineering*, a workshop held at *GPCE*, Portland, OR, October 2006.

**Organizing Committee**

*Domain-Specific Modeling*, a workshop held at *OOPSLA*, Portland, OR, October 2006.

**Program Committee**

*International Symposium on Distributed Objects and Applications (DOA)*, Montpellier, France, October/November 2006.

**Organizing Committee**

*International Workshop on Models for Enterprise Computing (IWMEC 2006)*, a workshop held at the *EDOC* conference, Hong Kong, October 2006.

**Organizing Committee**

*9th International Workshop on Aspect-Oriented Modeling*, a workshop held at *MODELS*, Genova, Italy, October 2006.

**Program Committee**

*International Workshop on Meta-models, Schemas and Grammars and Ontologies for Reverse Engineering*, a workshop held at *MODELS*, Genova, Italy, October 2006.

**Program Committee**

*Third Brazilian Workshop on Aspect-Oriented Software Development (WASP '06)*, Florianópolis, Santa Catarina, Brasil, October 2006.

**Program Committee**

*International Workshop on Graph and Model Transformation*, a workshop held at *VL/HCC*, Brighton, UK, September 2006.

**Program Committee**

*1st ECOOP Workshop on Domain-Specific Program Development*, a workshop held at *ECOOP*, Nantes, France, July 2006.

**Program Committee**

*European Workshop on Composition of Model Transformations*, a workshop held at *European Conference on Model-Driven Architecture*, Bilbao, Spain, July 2006.

**Program Committee**

*Aspect-Based and Model-Based Separation of Concerns in Software Systems*, a workshop held at *European Conference on Model-Driven Architecture*, Bilbao, Spain, July 2006.

**Program Committee**

*First International Workshop on Global Integrated Model Management*, a workshop held at the *International Conference on Software Engineering (ICSE)*, Shanghai, China, May 2006.

**Program Committee**

*Model-Driven Enterprise Information Systems (MDEIS)*, a workshop held at the 8<sup>th</sup> *International Conference on Enterprise Information Systems (ICEIS)*, Paphos, Cyprus, May 2006.

**Program Committee**

*Model Transformations*, a track at the 21<sup>st</sup> annual *ACM Symposium on Applied Computing (SAC)*, Dijon, France, April 2006.

**Program Committee**

*Object-Oriented Programming Languages and Systems*, a track at the 21<sup>st</sup> annual *ACM Symposium on Applied Computing (SAC)*, Dijon, France, April 2006.

**Organizing Committee**

8<sup>th</sup> *International Workshop on Aspect-Oriented Modeling*, a workshop held at the *International Conference on Aspect-Oriented Software Development (AOSD)*, Bonn, Germany, March 2006.

**Program Committee**

*IEEE International Symposium on the Engineering of Computer-Based Systems (ECBS)*, Potsdam, Germany, March 2006.

**Organizing Committee**

*Adaptive and Evolvable Software Systems: Techniques, Tools, and Applications*, a mini-track to the Software Technology Track for HICSS-39, Kauai, HI, January 2006.

**Program Committee**

*The 26th IEEE Real-Time Systems Symposium (RTSS)*, track on “Real-Time Middleware and Software Engineering,” Miami, FL, December 2005.

**Program Committee**

1<sup>st</sup> *Workshop on Aspect-Based and Model-Based Separation of Concerns in Software System*, a workshop held at the *European Conference on Model Driven Architecture - Foundations and Applications*, Nuremberg, Germany, November 2005.

**Program Committee**

*International Symposium on Distributed Objects and Applications (DOA)*, Agia Napa, Cyprus, November 2005.

**Student Research Paper Judge**

*ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2005.

**Program Committee**

*eclipse Technology Exchange (eTX) Workshop*, a workshop held at *OOPSLA*, San Diego, CA, October 2005.

**Organizing Committee**

*International Workshop on Software Factories*, a workshop held at *OOPSLA*, San Diego, CA, October 2005.

**Program Committee**

*Domain-Specific Modeling*, a workshop held at *OOPSLA*, San Diego, CA, October 2005.

**Program Committee**

*The 3<sup>rd</sup> Workshop on Java Technologies for Real-time and Embedded Systems*, a workshop held at *OOPSLA*, San Diego, CA, October 2005.

**Doctoral Symposium Chair**

*Model-Driven Engineering Languages and Systems (MODELS)* - formerly, the UML Conference, Montego Bay, Jamaica, October 2005.

**Organizing Committee**

*7<sup>th</sup> International Workshop on Aspect-Oriented Modeling*, a workshop held at *MODELS*, Montego Bay, Jamaica, October 2005.

**Program Committee**

*Model-Driven Development for Software Product Lines*, a workshop held at *MODELS*, Montego Bay, Jamaica, October 2005.

**Program Committee and Session Chair**

*OMG's Architecture Design Modernization (ADM) Workshop*, Alexandria, VA, October 2005.

**Program Committee**

*Second Brazilian Workshop on Aspect-Oriented Software Development (WASP '05)*, Uberlândia City, Minas Gerais, Brasil, October 2005.

**Organizing Committee**

*ACM Conference on Generative Programming and Component Engineering (GPCE)*, Tutorials and Workshop Chair, Tallinn, Estonia, September 2005.

**Program Committee**

*Graph and Model Transformation*, a workshop held at *GPCE*, Tallinn, Estonia, September 2005.

**Program Committee**

*Aspects and Software Product Lines: An Early Aspects Workshop*, a workshop held at *SPLC-Europe*, Rennes, France, September 2005.

**Scientific Committee**

*Generative and Transformational Techniques in Software Engineering (GTTSE)*, Braga, Portugal, July 2005.

**International Scientific Program Committee**

*International Embedded and Hybrid Systems Conference*, Singapore, April 2005.

**Program Committee**

*IEEE International Symposium on the Engineering of Computer-Based Systems (ECBS)*, Washington, DC, April 2005.

**Organizing Committee**

*Aspect-Oriented Modeling*, a workshop at the *International Conference on Aspect-Oriented Software Development (AOSD)*, Chicago, IL, March 2005.

**Birds of a Feather Organizer**

*Teaching Aspects*, a BoF at the *International Conference on Aspect-Oriented Software Development (AOSD)*, Chicago, IL, March 2005.

**Program Committee**

*Object-Oriented Programming Languages and Systems*, a track at the 20th annual *ACM Symposium on Applied Computing (SAC)*, Santa Fe, NM, March 2005.

**Program Committee**

*Model-Driven Real-Time and Embedded Systems* track at the *11th IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 2005)*, San Francisco, CA, March 2005.

**Organizing Committee**

*Southeastern Software Engineering Conference*, Huntsville, AL, March 2005.

**Session Judge**

*UAB Graduate Research Day*, March 2005.

**Organizing Chair**

*Adaptive and Evolvable Software Systems: Techniques, Tools, and Applications*, a mini-track to the Software Technology Track for HICSS-38, Big Island, HI, January 2005.

**Session Chair**

*38<sup>th</sup> HICSS Track on Distributed Object and Component-Based Software Systems*, Big Island, HI, January 2005.

**Program Committee**

*International Workshop on Meta-models, Schemas and Grammars for Reverse Engineering*, a workshop at the *11th International Conference on Reverse Engineering*, Delft, The Netherlands, November 2004.

**Head Organizing Judge**

*ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2004.

**Program Committee**

*Domain-Specific Modeling*, a workshop held at *OOPSLA*, Vancouver, BC, October 2004.

**Organizing Committee and Session Chair**

*ACM Conference on Generative Programming and Component Engineering (GPCE)*, Tutorials Chair, Vancouver, BC, October 2004.

**Program Committee**

*Brazilian Workshop on Aspect-Oriented Software Development*, Brasilia, Brazil, October 2004.

**Program Committee**

*UML Conference*, Lisbon, Portugal, October 2004.

**Organizing Committee**

*Aspect-Oriented Modeling with UML*, a workshop held at the *UML Conference*, Lisbon, Portugal, October 2004.

**Program Committee**

*OMG's 1<sup>st</sup> Annual Model Integrated Computing (MIC) Workshop*, Washington, D.C., October 2004.

**Organizing Committee**

*Model-Driven Evolution of Legacy Systems: Tools and techniques to facilitate development of adaptable enterprise systems*, a workshop held at the *EDOC Conference*, Monterey, CA, September 2004.

**Program Committee**

*Fourth Workshop on TAO and CIAO*, Washington, D.C., July 2004.



**Program Committee**

*IEEE International Symposium on the Engineering of Computer-Based Systems (ECBS)*, Brno, Czech Republic, May 2004.

**Program Committee**

*Workshop on Model-Driven Embedded Systems*, a workshop held at the *IEEE Real-time/Embedded Technology and Applications Symposium (RTAS)*, Toronto, Canada, May 2004.

**Session Chair**

*Southeast Software Engineering Conference Doctoral Symposium*, Huntsville, AL, March 2004.

**Program Committee**

*Aspects, Components, and Patterns for Infrastructure Software (ACP4IS)*, a workshop held at the *Aspect-Oriented Software Development (AOSD)* conference, March 2004.

**Program Committee**

*Object-Oriented Programming Languages and Systems*, a special track at the 19th annual *ACM Symposium on Applied Computing (SAC)*, Nicosia, Cyprus, March 2004.

**Program Committee and Session Chair**

*ACM Southeast Conference*, Huntsville, AL, March 2004.

**Organizing Chair**

*Adaptive and Evolvable Software Systems: Techniques, Tools, and Applications*, a mini-track to the Software Technology Track for HICSS-37, Big Island, HI, January 2004.

**Session Chair**

*37<sup>th</sup> HICSS Track on Distributed Object and Component-Based Software Systems*, Big Island, HI, January 2004.

**Head Organizing Judge**

*ACM Mid-Southeast Conference*, Gatlinburg, TN, November 2003.

**Organizing Chair**

*Domain-Specific Modeling*, a workshop held at *OOPSLA*, Anaheim, CA, October 2003.

**Organizing Committee**

*Aspect-Oriented Modeling with UML*, a workshop held at the *UML Conference*, San Francisco, CA, October 2003.

**Program Committee and Session Chair**

*UML Conference*, San Francisco, CA, October 2003.

**Organizing Committee**

*Third Workshop on Domain-Specific Visual Languages*, workshop at the conference on *Generative Programming and Component Engineering (GPCE)*, Erfurt, Germany, September 2003. (workshop merged with *OOPSLA DSM* 2003).

**Program Committee**

*Workshop on Model-Driven Embedded Systems*, a workshop held at the *IEEE Real-time/Embedded Technology and Applications Symposium (RTAS)*, Washington, D.C., May 2003.

**Program Committee**

*IEEE International Symposium on the Engineering of Computer-Based Systems (ECBS)*, Huntsville, AL, April 2003.

**Program Committee and Doctoral Symposium Panelist**

*Southeastern Software Engineering Conference*, Huntsville, AL, April 2003.

**Organizing Committee**

*International Conference on Aspect-Oriented Software Development*, Workshops Co-Chair, Boston, MA, March 2003.

**Session Chair**

*36<sup>th</sup> HICSS Track on Distributed Object and Component-Based Software Systems*, Big Island, HI, January 2003.

**Judging Committee**

*ACM Mid-Southeast Conference*, Lead judge – Masters paper division, Gatlinburg, TN, November 2002.

**Organizing Committee**

*Second Workshop on Domain-Specific Visual Languages*, a workshop held at *OOPSLA 2002*, Seattle, WA, October 2002.

**Organizing Committee**

*Early Aspects: Aspect-Orientation at Early Software Development Stages*, a workshop held at the *First International Conference on Aspect-Oriented Software Development*, Enschede, The Netherlands, April 2002.

**Local Organizing Committee**

*NSF Workshop on New Visions for Software Design and Productivity: Research and Applications*, Nashville, TN, December 2001.

**Publicity Chair and Organizing Committee**

*Workshop on Domain-Specific Visual Languages*, a workshop held at *OOPSLA 2001*, Tampa, FL, October 2001.

*Advisory  
Boards*

Board of Directors, *Alabama Mathematics, Science, Technology and Education Coalition* – AMSTEC (2007-present)

National Cyber.org *K-12 Cyber Standards Review Committee* (2021-2022)

Educational Advisory Council for Code.org (2013-2017)

*Google CS4HS Ambassador* (2017-present)

Course-level Advisory Board, *Project Lead the Way (PLTW), AP Computer Science A* (2017-2019)

Course-level Advisory Board, *Project Lead the Way (PLTW), Computer Science Applications* (2014-2016)

Board of Advisors for Computer Science, *National Math and Science Initiative (NMSI)*

University Faculty Liaison, *Alabama CSTA Chapter* (2013-present)

Faculty Advisory Board for the University of Alabama's student chapter of *Design for America* (2016-present)

Advisory Board for the NSF IUSE Project at Florida International University, "Using a Cyberlearning Environment to Improve Student Learning and Engagement in Software Courses," (2016-present)

Advisory Board for the *Integrating Computer Science* NSF STEM-C project (2015-present)

External Research and Technical Advisory Board for the *Nevada Infrastructure for Climate Change Science, Education, and Infrastructure*, Funded by NSF, \$15M (2008-2013)

Advisory Board, Democratize Computing Lab – advise a coalition of institutions in the California State Community College system on a large Department of Labor award (2012-2014)

Academic Enrichment Advisory Board, *Tuscaloosa City Schools* (2012-present)

Demographic-Facility Advisory Board, *Tuscaloosa City Schools* (2014-present)

Technology Task Force, *Altamont School* (2014-present)

College and Career Academy Advisory Board, *Pelham High School* (2015-present)

Engineering Academy Advisory Board, *Carver High School* (2012-present)

Career Tech Advisory Board, *Brookwood High School* (2020-present)

Career Tech Advisory Board, *Tuscaloosa County High School* (2019-present)

Career Tech Advisory Board, *Tuscaloosa Career and Technology Academy* (2019-present)

Computer Science Academy Advisory Board, *Athens Elementary School* (2017-present)

Advisory Board, *Partner4CS Project*, an NSF CE21 project at the University of

Delaware (2014-present)

Advisory Board, Bulheller Consulting, Inc. (2011-present)

Advisor to *GEMOC, Globalization of Modeling Languages*, an International Collaboration between the European Union and the United States (2013-present)

Advisor to *ReMoDD: A Repository for Model Driven Development*, an NSF project under investigation by Drs. Robert France, Betty Cheng, and James Bieman (2006-present)

Member of the *Magnolia Festival Scholarship Selection Committee* (2007-2010)

Appointed to the *Gardendale Citizens Education Committee* (2007-2010)

Board Member, *Spain Park High School Business Technology Committee* (2009-2012)

Board of Directors, Magic City Technology Council (2006-2007)

Advisory Committee Member, Bessemer Center for Technology (2006-2007)

*Reviewer-Conferences*

*Generative Programming and Component Engineering (GPCE)*, Eindhoven, The Netherlands, October 2010.

*ACM Southeast Conference*

Atlanta, GA, March 2005.

Savannah, GA, March 2013.

Bioinformatics Track at the *ACM Symposium on Applied Computing (SAC)*, Nicosia, Cyprus, March 2004.

*37<sup>th</sup> HICSS Track on Distributed Object and Component-Based Software Systems*, Big Island, HI, January 2004.

*Enterprise Distributed Object Computing Conference*, Brisbane, Australia, September 2003.

*ACM International Middleware Conference*, Rio de Janeiro, Brazil, June 2003.

*36<sup>th</sup> HICSS Track on Distributed Object and Component-Based Software Systems*, Big Island, HI, January 2003.

*Reviewer-Grants*

Served as NSF CISE reviewer:

Spring 2016 (CISE-SHF)

Spring 2015 (CISE-SHF)

Spring 2013 (CISE-CE21)

Spring 2012 (CISE-IIS)

Fall 2010 (CISE-CPS)

Spring 2008 (CISE-CPA)

Fall 2007 (CISE-CPA)

Spring 2007 (CISE-CSR)

Summer 2005 (CISE-CSR)

Spring 2004 (CISE-CSR)

Served as reviewer for the Netherlands Organization for Scientific Research, Spring

2014.

Served as reviewer for the Belgium Fund for Scientific Research-FNRS, Fall 2012.

Served as reviewer for the Austrian Science Fund, Fall 2008, Spring 2012, Fall 2012.

Served as a reviewer for the W.M. Keck Foundation, Fall 2012.

Served as reviewer for Canada NSERC, Spring 2006, Spring 2010, Spring 2012, Spring 2014.

Served as reviewer for the UA Research Grants, Spring 2012.

Served as reviewer for Israel Science Foundation, Spring 2011.

Served as reviewer for Estonia Science Foundation, Fall 2009.

Served as reviewer for Swiss National Science Foundation, Spring 2009.

Served as reviewer for Science Foundation Ireland, Fall 2008.

Served as reviewer for *Le Fonds québécois de la recherche sur la nature et les technologies*, Québec, Canada, Spring 2006.

Served as Tennessee DEPSCOR Reviewer, Fall 2004.

#### Reviewer- Books

*Innovative Technologies to Benefit Children on the Autism Spectrum*, Idea Group, 2013.

*Behavioral Modeling for Embedded Systems and Technologies: Applications for Design and Implementation*, Idea Group, 2009.

*Designing Software-Intensive Systems: Methods and Principles*, Idea Group, 2008.

Reviewer for Wiley & Sons on several book proposals (2 in 2005).

*Model-Driven Software Development - Volume II of Research and Practice in Software Engineering*, Springer-Verlag, 2005.

*Object-Oriented Analysis and Design*, Stephen R. Schach, McGraw-Hill, 2003.

*Building Application Frameworks: Object-Oriented Foundations of Framework Design*, Mohamed Fayad, Doug Schmidt, and Ralph Johnson, eds., John Wiley & Sons, 1999.

#### Reviewer- Journals

*Communications of the ACM* (Regular reviewer, in addition to below)

Special Issue on Object Technology (1996)

Special Issue on Frameworks (1997)

Special Issue on Aspect-Oriented Programming (2001)

*IEEE Computer* (Regular reviewer, in addition to below)

Special Issue on Model-Driven Engineering (2006)

Special Issue on Models at Runtime (2009)

*IEEE Transactions on Software Engineering* (Regular reviewer, in addition to below)

Special Issue on Software Language Engineering (2008)

*IEEE Software* (Regular reviewer, in addition to below)

Special issue on Domain-Specific Languages and Modeling (2009)

- Special issue on End-User Software Engineering (2009)
- Computer Languages, Systems, and Structures*
- Journal of Engineering Education*
- Journal of Systems Architecture*
- Special Issue from Intl. Conference on Embedded Software and Systems (2012)
- Transactions on Aspect-Oriented Software Development* (Regular reviewer, in addition to below)
- Special Issue on Aspects for Systems Software and Middleware (2005)
- Special Issue on Aspects for Software Evolution (2006)
- Special Issue on Early Aspects (2006)
- Special Issue on Aspects, Dependencies and Interactions (2007)
- Special Issue on Aspects and MDE (2008)
- Special Issue on Aspect-Oriented Modeling Approaches (2009)
- ACM Transactions on Software Engineering and Methodology* (Regular reviewer)
- Software and Systems Modeling* (Regular reviewer and Editorial Board)
- Special Issue on Graph Transformations and Visual Modeling Techniques (2004)
- Special Issue on the Best of UML (2004)
- Special Issue on the Best of MODELS (2007)
- Special Issue on Metamodeling (2007)
- Special Issue on Model-Based Interoperability (2010)
- Science of Computer Programming* (Regular reviewer)
- Special Issue on Software Evolution (2010)
- Software: Practice and Experience* (Regular reviewer)
- ACM Computing Surveys* (Regular reviewer)
- IBM Systems Journal* (2007)
- Journal of Visual Languages and Computing*
- Special Issue on Visual Interactions in Software Artifacts (2007)
- IEEE Transactions on Computers*
- Special Issue on Speech-based Human-Computer Interaction (2007)
- Advances in Software Engineering* (2010)
- IEEE Transactions on Systems, Man, and Cybernetics* (2010)
- Springer Foundations of Computer Science*
- ACM Transactions on Modeling and Computer Simulation* (2007)
- IEEE Internet Computing*
- Special Issue on Dependable Service-Oriented Computing (2008)
- ACM Transactions on Internet Technology*
- Special Issue on Middleware for Service-Oriented Computing (2006)
- Simulation: Transactions of the Society for Modeling & Simulation* (Regular reviewer)

*International Journal of Software Engineering* (2008)

*Journal of Computer Science Education* (2011)

*The Computer Journal (British Computer Society)*  
Special Issue on Aspect-Oriented Programming (2003)

*IET Software*

Special Issue on Early Aspects: Aspect-Oriented Requirements Engineering and Architecture Design (2004)

Special Issue on Composition of Model Transformations (2007)

Special Issue on Domain-Specific Aspect Languages (2007)

Special Issue on Language Engineering (2008)

*Journal of Object Technology* (Regular reviewer)

*Software Quality Journal*

*International Journal of Computers and Applications* (Regular reviewer)

*Transactions of the South African IEEE*  
Special Issue on Software Engineering (1996)

*Journal of the Brazilian Computer Society*  
Special Issue on Aspect-Oriented Software Development (2004)

*Reviewer -  
Other*

Program Review Committee Member for the University of Nebraska's new program in Computer Science Education (Summer 2016)

Chair of the program review for the Department of Computer and Information Science Program for Indiana University Purdue University Indianapolis (IUPUI) (Fall 2014)

Reviewer (11 page report) for Tennessee Board of Regents and the Tennessee Higher Education Commission for a proposed Masters of Science program in Engineering Technology, Austin Peay University (Fall 2013)

Authored "Five Year Department Assessment" (20 pages) for Samford University's Computer Science Program (Fall 2011)

U.S. Professors of the Year, *Carnegie Foundation for the Advancement of Teaching*, 2010 and 2011

*Student Offices*

**Vanderbilt Computer Science Graduate Student Organization (CSGSO)**  
President (1997), Treasurer (1996), Faculty Meeting Representative (1995)

**WVU Student Chapter of the ACM**  
Vice-President (1991)

*Science-Fair  
Judging*

**Alabama School of Fine Arts Senior Research Symposium**

Served as judge for the 2011-2014 Senior Projects.

**Central Alabama Science and Engineering Fair**

Served as judge for the computer science division, 2005.

**Middle Tennessee Science and Engineering Fair**

Served as judge for the computer science division, 1999-2001.

*Conferences/  
Meetings  
Attended*

- ACM OOPSLA/SPLASH – attended every year from 1995 through 2015, 2019
- MODELS Conference 2003, 2005, 2007, 2009-2019
- ACM SIGCSE Symposium on Computer Science Education, 1995, 2010-2019
- ACM Generative Programming and Component Engineering 2002-2004, 2006, 2008, 2009, 2019
- ACM Aspect-Oriented Software Development 2002-2005, 2009, 2015
- IEEE/ACM Intl. Conference on Software Engineering 2001, 2003, 2005, 2007, 2011-2013, 2015
- Code.org Governors for CS Summit, 2016, 2017, 2018, 2019
- NCWIT Annual Summit, 2016-2019
- College Board AP CS Principles Pilot Meeting 2011-2016
- White House Summit on CSforAll, 2016
- ACM Learning at Scale Conference 2014
- NSF BPC/CE21/STEM+C PI Meeting 2006, 2010-2017
- NSF Workshop on MOOCS and Online Learning for CS Principles, 2013
- Computer Science Teachers Association Conference, 2014-2019
- Software Language Engineering 2009, 2019
- Dagstuhl Workshop on Model Engineering of Complex Systems 2008
- Google/CSTA K-12 Outreach Roadshow Workshop 2008
- Hawaii International Conference on System Sciences 2003-2005, 2007
- TOOLS Europe 2007, 2008, 2010
- ICMT 2008, 2010
- Working Conference on Domain-Specific Languages 2009
- Automated Software Engineering 2007
- Microsoft Imagine Cup Finals 2009
- Conference on Software Engineering Education and Training 2011
- Intel International Science and Engineering Fair 2010
- ACM SIGSOFT Foundations of Software Engineering 2000, 2010
- Google IO 2011
- Google/MIT App Inventor Research Meeting 2011
- CMU Workshop on Alice 3 2009
- Alice Media Computation Workshop 2007
- Microsoft Research Faculty Summit (Redmond) 2005, 2006
- Microsoft Academic Days (Orlando) 2005
- Southeast Software Engineering Conference 2002, 2003, 2004, 2005
- IEEE Enterprise Distributed Object Computing Conference 2004
- ACM/USENIX Middleware Conference 2003
- IEEE Engineering of Computer-Based Systems 1999, 2003
- CORBA Real-Time CCM Meeting 2002, February 2003, December 2003
- IEEE International Symposium on OO Real-Time Distributed Computing 2002
- OMG Workshop on Architecture Driven Modernization 2005
- OMG Workshop on Model-Integrated Computing 2004
- OMG Workshop on Real-Time/Embedded DOC 2002
- CRA Academic Careers Workshop 2004
- DARPA PCES PI Meeting 7/00, 2/01, 5/01, 10/01, 4/02, 7/02, 12/02, 6/03, 12/03, 6/04, 12/04
- NSF ITEST Cohorts Meeting 2008, 2010, 2011
- NSF Regional Grants Conference 2002, 2006
- Governor's Summit on Mathematics and Science Education 2006, 2011
- O'Reilly Emerging Technology Conference 2002
- ACM Mid-Southeast Conference 1995, 1996, 1999, 2002 through 2009



- ACM Southeast Conference 2000, 2003, 2004, 2010, 2012, 2014, 2019
- Consortium for Computing Sciences in Colleges 2006
- 1<sup>st</sup> ACE/TAO Workshop 2001
- NSF Workshop on New Visions for Software Design/Productivity 2001, 2010
- IEEE Aerospace Conference 2000
- Boeing's Product Data Exchange Conference 2000
- Borland Developers Conference 1997
- SEI/CMU Annual Disciplined Engineering Workshop 1995
- ACM CSC/Computing Week (Student Volunteer) 1995
- Software Valley/WVU Reuse Workshop 1992
- ACM Tri-Ada 1988, 1989, 1993

## Awards & Honors

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*Commendations*      *Commendation from Governor Kay Ivey for Leadership in K-12 Computer Science in Alabama*, presented at the *2019 Governor's Computer Science Summit*, Montgomery, AL, April 30, 2019.

*Commendation from Governor Kay Ivey for participation on the ACES STEM Steering Committee*, Montgomery, AL, November 15, 2019.

*Non-Scholarly Awards*      *Gardendale Citizen of the Year* (2008)

*Entrepreneurial Awards*      A proposal called "Automax" was designated a Finalist in the 2011 Alabama Launchpad Competition (with Bulheller Consulting, Inc.)

*Teaching/Service Awards*      University of Alabama "Morris Lehman Mayer Premier Award," 2023.

   "Top Faculty Mentor Award," *University of Alabama Undergraduate Research*, 2021.

   "Distinguished Community Engaged Scholar," *University of Alabama Council on Community-Based Partnerships*, 2020.

   "Outstanding Faculty-Initiated Engagement Effort," *University of Alabama Council on Community-Based Partnerships*, 2015.

   "Outstanding Contributions to West Alabama Services and Youth," *West Alabama Chapter of The Links*, 2015.

   "Educator of the Year," *Engineering Council of Birmingham*, 2015 (first year awarded)

   "Alabama Professor of the Year," *Carnegie Foundation for the Advancement of Teaching*, 2008-2009

   Selected as UAB's nominee for the CASE/Carnegie Professor of the Year, 2008

   Selected as the *Barnard Endowed Award* winner for 2006-2007, which recognizes "outstanding CIS faculty who exhibit high-quality instruction."

   Nominated by the CIS Department for the Presidential Teaching Award, 2006

   Vanderbilt University Computer Science Teaching Assistant of the Year (1994-1995)

<i>Conference Paper Awards</i>	<i>Best Paper Award at the 24<sup>th</sup> International Conference on Software Engineering and Data Engineering (2015)</i>
	<i>Best Presentation Award at the HIPC Student Research Symposium (2010)</i>
	<i>Best Paper Award, Transformation and Weaving Ontologies in Model-Driven Engineering (TWOMDE), a workshop held at MODELS 2008</i>
	<i>3<sup>rd</sup> Place – Poster Award, 44<sup>th</sup> ACM Southeast Conference (2006)</i>
	<i>Both 1<sup>st</sup> and 3<sup>rd</sup> Place, Alabama IEEE Best Paper of the Year Award (2004)</i>
	<i>Best Conference Paper Award at the 38<sup>th</sup> Annual ACM Southeast Conference (2000)</i>
	<i>1<sup>st</sup> place in the Doctoral Paper Division at the ACM Mid-Southeast Conference (1999)</i>
<i>Travel Awards</i>	Received a \$1,000 travel scholarship from ACM to attend the SIGSOFT <i>Foundations of Software Engineering</i> conference in San Diego, CA (November 2000)
	Received numerous awards to attend ACM's OOPSLA conference
<i>Graduate Awards</i>	Nominated as Vanderbilt's candidate (2002) for the <i>ACM Doctoral Dissertation Competition</i>
	1995 recipient of the <i>IEEE Computer Society/Upsilon Pi Epsilon Honor Society Award for Academic Excellence</i> (see pg. 89 of <i>IEEE Computer</i> , June 1996)
<i>Undergraduate Awards</i>	Designated a WVU Arts and Sciences Scholar (1990 and 1991), 1 of 15 from over 3,000 students in the college of Arts and Sciences (top 1 %)
	1 of 2 WVU students nominated to participate in the Barry Goldwater Science Competition (1990 - sophomore year)
	Completed my undergraduate degree in three years while graduating <i>summa cum laude</i> from the West Virginia University Honors Program; Consistently made the Dean's List every semester of my undergraduate years.
<i>High School Science Awards</i>	My high school research paper was 1 of 25 international semi-finalists from over 1,000 entries in the <i>Edison/McGraw Science Search</i> . This paper was a Westinghouse award winner for the state of West Virginia during my senior year of high school. With a similar project, I won first place in computer science at the <i>West Virginia State Science and Engineering Fair</i> during my sophomore year.

## Academic Service

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<i>Online Courses</i>	<i>Preparation for the ETS 5652 Praxis Exam</i> , facilitated a 6-week online course that prepared 40 Alabama secondary teachers for the CS praxis exam. Summer 2019. With Becky Bartel.
	<i>Alabama CS Principles for High School</i> , an international MOOC that trained over 2,200 teachers across the world on CS Principles (before it was AP), sponsored by Google CS4HS, Summer 2015 and Summer 2016. <a href="https://csp-cs4hs.appspot.com/">https://csp-cs4hs.appspot.com/</a>

- UA Courses*
- New Course: CS 104 –Computer Science Principles, supported by the College Board and NSF as part of two CS Principles Pilots (Pilots II and III cohorts), each Fall (since Fall 2011)
- New Course: CS 492/592: Computer Science Education for Math Education Majors, supported by NSF as the second part of a course pathway to prepare Secondary Math Education students to be certified as AP CS Principles teachers. With Becky Bartel and Jeremy Zelkowski.
- New Course: CS 395 – Competitive Programming, co-taught each semester (since Fall 2012)
- New Course: CS 495 - CAPSTONE Senior Design Course, each semester (since Spring 2010)
- New Course: CS 699 - Reflective & Adaptive Systems, Fall 2010
- UAB Courses*
- New Course: CS 105 – Introduction to Game Programming Using Alice, each Fall
- New Course: CS 497/597 - Competitive Programming Techniques (2004-2005)
- New Course: CS 622/722 - Reflective & Adaptive Systems, each Fall
- New Course: CS 620/720 - Advanced Software Engineering, each Spring
- CS 201 – Object-Oriented Programming with Java, Summer 2004-2007, Fall 2009
- CS 697/796 - Directed Readings (various students), each Semester
- CS 626/726 - Software Development Seminar
- Fall 2002: Web Services and XMI
- Spring 2003: Model-Driven Architecture
- Summer 2003: Eclipse Plug-in Development
- Fall 2003: Invasive Software Composition
- Spring 2004: Program Transformation Systems
- Summer 2004: .Net CLI
- Fall 2004 and Spring 2005: Software Factories
- Summer 2005: Microsoft Phoenix
- Fall 2005: Software Performance Modeling
- Spring 2006: Software Performance Modeling
- Fall 2006: Model-Driven Software Development
- Spring 2007: Design Rules
- Invited Lectures*
- “Enhancing the Lecture,” *GRD 705: Teaching at the College Level and Beyond*, February 16, 2009.
- “Enhancing the Lecture,” *Excellence in Teaching: A Seminar Series for New Faculty*, January 28, 2009.
- Habilitation Defense*
- Dr. Ciprian Teodorov, “GVminE: Exploring the Boundary Between Executable Specification Languages and Behavior Analysis Tools,” ENSTA Bretagne, April 3, 2023.
- Post-Doctoral Advising*
- August 2010-August 2012:  
Dr. Romain Delamare, INRIA and Université Rennes, France
- February 2010-August 2010:  
Dr. José Eduardo Rivera, Universidad de Málaga, Spain
- January 2007-December 2007:  
Dr. Frédéric Jouault, Université de Nantes and INRIA.

*Fulbright  
Student  
Advising*

August 2009-June 2010:  
Dr. Tomaž Lukman, Jožef Stefan Institute in Ljubljana, Slovenia.

*Visiting  
Students*

May 2015-July 2015:  
Kathleen C. Pereira, Exchange Student - Brazilian Scientific Mobility Program (BSMP)

January 2014-May 2014:  
Loli Burgueno, University of Malaga

August 2008-May 2009:  
Dr. Shaundra Daily, MIT Media Laboratory.

*Student  
Advising*

Doctoral Dissertation Advisor:

Dr. Jane Lin (2002-2007)  
*A Model Transformation Approach to Automated Model Evolution*

Dr. Hui Wu (2002-2007)  
*Grammar-Driven Generation of Domain-Specific Language Testing Tools Using Aspects*

Dr. Suman Roychoudhury (2002-2008)  
*GenAWeave: A Generic Aspect Weaver Framework Based on Model-Driven Program Transformation*

Dr. Jing Zhang (2002-2009)  
*Model-Driven Aspect Adaptation to Support Modular Software Evolution*

Dr. Robert Tairas (2006-2010)  
*Representation, Analysis, and Refactoring Techniques to Support Code Clone Maintenance*

Dr. Yu Sun (2007-2011)  
*Model Transformation by Demonstration: A User-Centric Approach to Support Model Evolution*

Dr. Feroosh Jacob (2009-2013)  
*Modeling of High Performance Programs to Support Heterogeneous Computing*

Dr. Hyun Cho (2008-2013)  
*A Demonstration-Based Approach for Domain-Specific Language Creation*

Dr. Songqing Yue (2011-2015)  
*Evolving Legacy Software with a Generic Program Transformation Framework using Meta-Programming and Domain-Specific Languages*

Dr. Amber Wagner (2010-2015)  
*Programming by Voice: A Hands-Free Approach for Motorically Challenged Children*

Dr. Brian Eddy (2010-2015; previous advisor, Dr. Nicholas Kraft)  
*Using the Structural Location of Terms to Improve the Results of Text Retrieval based Approaches to Feature Location*

Dr. Jonathan Corley (2011-2016)  
*Exploring Efficient and Scalable Omniscient Debugging for MDE*

Dr. Huseyin Ergin (2012-2017)  
*Design Pattern Driven Development of Model Transformations*

Dr. Elizabeth Williams (2013-2017)  
*Discovering Geographical Topics from Social Media*

Dr. Saheed Popoola (2017-2021)  
*Change Analysis across Version Histories of Systems Models*

Dr. Xin Zhao (2015-2021)  
*An Investigation into Bad Smells in Model-Based Systems Engineering*

Dr. Moumita Tabassum (2018-2023)  
*Blocks-Based Programming for Visually Impaired Children*

In Progress: Ziliang Zhang (2019-present), Herart Nurue (2019-present), Trina Locklear (2022-present)

Previous advisor while at UAB: Zekai Demirezen (2007-2010), Dixon Shuttleworth (2008-2010)

Doctoral Dissertation Committee Member - UA:

Niaz Morshed, Jay Jackson (College of Education), Jill Westerlund (College of Education)

Doctoral Dissertation Committee Member - UA:

Dr. Shameka Dawson (2012)  
Dr. Aziz Nanthaamornphong (2014)  
Dr. Debarshi Chatterji (2014)  
Dr. Amiangshu Bosu (2015)  
Dr. Dustin Heaton (2015)  
Dr. Ahmed Al-Zubidy (2017)  
Dr. Wenhua Hu (2017)  
Dr. Christopher Corley (2018)  
Dr. Frank Yue (2019)  
Dr. Mahran Al-Zyoud (2019)  
Dr. Nasir Eisty (2020)  
Dr. Pezham Sheinidashtegol (2020)  
Dr. Eduardo Caballero (2021)  
Dr. Sweta Mahaju  
Dr. Bryan Hernandez (2022)  
Dr. Amanda Holloman (2022)

Doctoral Dissertation Committee Member - UAB:

Dr. Fei Cao (2005)  
Dr. Zhijie Guan (2005)  
Dr. Wei Zhao (2006)  
Dr. Francisco Hernandez (2006)  
Dr. Carl Wu (2007)  
Dr. Alex Liu (2007)  
Dr. Leonard Jowers (2007)  
Dr. Faizan Javed (2007)  
Dr. Ritu Arora (2010)  
Dr. Qichao Liu (2012)

Doctoral Dissertation Committee Member - External:

Dr. Raul Silaghi (2007, Swiss Federal Inst. of Tech. in Lausanne – EPFL)  
 Dr. Marcos Didonet Del Fabro (2007, University of Nantes, France)  
 Dr. Krishnakumar Balasubramanian (2007, Vanderbilt University)  
 Dr. Gan Deng (2007, Vanderbilt University)  
 Dr. Susan Entwisle (2007, Monash University, Australia)  
 Dr. Antonio Cicchetti (2008, University of L'Aquila, Italy)  
 Dr. Jules White (2008, Vanderbilt University)  
 Dr. Amogh Kavimandan (2008, Vanderbilt University)  
 Dr. James Hill (2009, Vanderbilt University)  
 Dr. Sumant Tambe (2010, Vanderbilt University)  
 Dr. Marouane Kessentini (2011, University of Montreal)  
 Dr. Brian Dougherty (2011, Vanderbilt University)  
 Dr. Celina Gibbs (2011, University of Victoria)  
 Dr. Will Otte (2011, Vanderbilt University)  
 Dr. Andrés Vignaga (2011, Universidad de Chile)  
 Dr. Philip Langer (2011, Vienna University of Technology)  
 Dr. Suronapee Phoomvuthisarn (2012, University of New South Wales)  
 Dr. Peng Li (2012, University of British Columbia)  
 Dr. Akshay Dabholkar (2012, Vanderbilt University)  
 Dr. Raphael Mannadiar (2012, McGill University)  
 Dr. Victor Manuel Guana Garces (2017, University of Alberta)  
 Dr. Simon Van Mierlo (2018, University of Antwerp)  
 Dr. Danielle Gaither (2018, University of North Texas)  
 Dr. Gavin Puddy (2022, University of Adelaide)  
 Dr. Arvid Butting (2022, RWTH Aachen)  
 Dr. Maxime Savary-Leblanc (2022, University of Lille)  
 Dr. Mauricio Verano (2022, TU Eindhoven)  
 Dr. Qishen Zhang (2023, Vanderbilt University)

Masters Thesis Advisor - UAB:

Dr. Rajesh Sudarsan (2002-2004) – Ph.D. from Virginia Tech

Masters Project Advisor:

Shairaj Shaik (2003-2004), Prem Somasundaram (2002-2004), Robert Tairas (2005), Zac Williams (2006), Amelia Hale (2006-2007), Rohit Shenvi (2006-2008), Brittany Stewart (2009-2010), Ramaraju Rudraraju (2010), Srinivasa Datla (2010), Avishek Banerjee (2010), Mandar Sudame (2010), Walker Haddock (2009-2010), Prateek Bahri (2012)

Masters Thesis Committee Member:

Marie Neubrandner (2021, UA – Mathematics)  
 Paul Kilgo (2012, UA)  
 Dimple Kaul (2007, Vanderbilt)  
 Crutcher Dunnavant (2004, UA)  
 Murali Dhanakoti (2004, UAB ME)  
 Purvi Shah (2002-2003, UAB)

Undergraduate Research Mentor

(+ indicates NSF supported, \* indicates Emerging Scholars student, # indicates Randall Research Scholar/Computer Based Honors student, ! indicates CS 392/499 research student, & indicates Mercedes-Benz sponsored project):

\*Andrew Hahn (2022), !&Jared Harvey (2022), !&Vyas K. Padmanabhan (2022), !&Matthew Porter (2022), !&Asit Singh (2022), #!&Kittson Hamill (2021), !&Megan Carneal (2021), \*Kate Sanborn (2020, 2021, 2022), \*Luke Lindsey (2020, 2021), !&Stephen Gregory (2020, 2021), !&Utkarsh Singh (2020, 2021), &Jesse Boone (2020), Bryan Whitehurst (2020, 2021, 2022), !Tyler Riggins (2020), !Katie

Zucker (2020), &Gage Wassweiler (2020), &Andrew Sartor (2020), \*&Benjamin Floyd (2019), !Houston Wingo (2019), !Desmond Jackson (2019), !Hunter James (2019), !Hunter Kimbrell (2019), !Nick Martin (2019), !Anh Luong (2019), &Hunter Allen (2019), &Nick Boltrakik (2019), &Oleksandr Busol (2019), !&Shengting Cao (2019), !&James Hong (2019), !&Kellie Madison (2019), !&Ethan Sorrell (2019), !&Pierce Stegman (2019), !&Tom Wan (2019), !&Landon Bentley (2019), !&Robert Mallow (2019), !&Tyler McClellan (2019), &Steve Thouvenot (2019), !&Zachary Wassinger (2019), !&Alexander Lay (2019), \*Blayde Dill (2018), !Nick Bucher (2017, 2018), &Sean Cuff (2018), &Josie Herumin (2018), &Landon Newberry (2018), &Jacob Paisley (2018), &Sheridan Santinga (2018), &Emily Turner (2018), !Chipper Atkins (2017), !Andrew Beams (2017), !Scott Carl (2017), !George Coll (2017), !Delaney D'Argenio (2017), !Evan Dwyer (2017), !Rick Flaget (2017), !Jon Hawley (2017), !Haylie Helmod (2017), !Ryan Link (2017), !Eric Tilley (2017), \*Pierce Stegman (2017), \*Landon Bentley (2017), \*Katie Zucker (2016, 2017), +Nath Tumlin (2016, 2017), !Chris Caruso (2016), !Melissa Jenkins (2016), !Conner Lines (2016), #Ben Romano (2015, 2016, 2017), \*Eric Tilley (2015, 2016, 2017), \*Nickolas McCarley (2015, 2016), !Steven Hohns (2015), \*Elizabeth Conrad (2015), !Angela Griffin (2015), \*Jacob Zarobsky (2015), +#Caitlin Hanley (2014, 2015, 2016), +\*Matt Bowen (2013, 2014, 2015, 2016), +Jake Trower (2014), +Kathy Hill (2014), +\*Anthony Timberlake (2014, 2015), \*Christina Noe (2014, 2015), +\*Rachel Stewart (2013, 2014), \*Matthew Baird (2013, 2014), +\*Cassidy Lamm (2012, 2013, 2014), +!Joshua Wolfe (2013, 2014, 2015), +Thomas Lewallen (2013, 2014), Justin Brooks (2013, 2014), \*Jared Beach (2013, 2014), #Chris Chockley (2013, 2014), \*Nick Dahl (2013, 2014), #Tarif Haque (2012, 2013, 2014), #Emily Liang (2012), +Matthew Robbins (2012), +Christopher Hodapp (2012), \*Johnathan Snyder (2012), +\*Joshua Pepperman (2012), Justin Graffagnini (2012), Ben Halbach (2012), Joshua Kaufmann (2012), Christopher McCarty (2012), Melissa Bowman (2011), Elizabeth Williams (2011), Leah Davenport (2011), Andrea Torske (2011), +Josh Swank (2010-2011), Robert Smyly (2010-2011), Joel Tully (2010), Timothy Uptain (2008-2010), Amos Smith (2006-2010), Ruben Vuittonet (2005-2006), Matthew Curry (2004), Victoria Davis (2004), Rachael Dennison (2003-2004), Pritesh Shah (2003-2004), and Bina Shah (2003-2004)

#### McNair Scholar Mentoring (undergraduate research mentor)

Tavaris Payton (2009 – Talladega College)

Dornesia Ward (2007 – Alabama State University)

#### High School Student Mentor:

Summer/Fall/Spring 2019-2020: Jammari Green

Summer/Fall/Spring 2018-2019: Cary Xiao, Aiden Yoder, Arrington Harper

Summer/Fall/Spring 2017-2018: Kevin Xiao, Joshua Holland

Summer/Fall/Spring 2016-2017: Blayde Dill, Taimur Ghani, Joseph Green, Ryan Kirk

Summer/Fall/Spring 2015-2016: Turner Atwood, Demarcus Campbell, Henry Rice

Summer/Fall/Spring 2014-2015: Victor Sui, Nath Tumlin, Sruti Josyula, Wendy Jiang

Summer/Fall/Spring 2013-2014: Tytiana Isaac, Desmond Jackson, Eric Lienert, Brandon Steine, Devin Sun, Nath Tumlin

Summer/Fall/Spring 2012-2013: Payton Walker, Yoni Brande, Neil Windon, Justin Timberlake, Casey Barnette

Summer/Fall/Spring 2011-2012: Jefferson Zhou and Anshu Bansal

Summer/Fall/Spring 2010-2011: Caitlin Marsh and James Yarbrough

Summer/Fall/Spring 2009-2010: Jemale Lockett, Omar Ismail, Wisdom Chen

Fall/Spring 2008-2009: Robert Smyly and Oliver White

Fall/Spring 2007-2008: Robert Smyly

Fall/Spring 2006-2007: George Tankersley and Will Whitney

Summer 2006: Ryan Muller, Will Whitney, George Tankersley, Jace Brewster

Fall/Spring 2005-2006: Cameron Gillette, Jerrod Sutton



Summer 2005: A. Beavers, R. Muller, P. Talati, Sally Tao, Katrina Wright, Jia  
Zhang  
Summer 2004: Matthew Ferguson and Erik Scott

*Graduate and  
Undergraduate  
Student  
Accomplishments*

At the 2021 University of Alabama Department of Computer Science Awards Ceremony (virtual), the following students received awards: Kate Sanborn (Tarif Haque Award), Utkarsh Singh (Outstanding Senior Undergraduate). Stephen Gregory (Outstanding Undergraduate Researcher).

At the *ACM Mid-Southeast Conference*, November 2020, Moumita Tabassum was awarded 1<sup>st</sup> place/Doctoral Division.

At the *ACM Mid-Southeast Conference*, November 2020, Kate Sanborn was awarded 1<sup>st</sup> place/Undergraduate Division.

Finalists for the University of Alabama *Three Minute Thesis (3MT)* contest

- Amber Wagner (2013)
- Elizabeth Williams (2016)
- Moumita Tabassum (2019)

Elizabeth Williams was the *Graduate Student of the Year* (Computer Science), at the Engineering Council of Birmingham, 2017

Eric Tilley was the inaugural recipient of the Tarif Haque Memorial Award for Undergraduate Computer Science, 2017.

In the Engineering category at the *University of Alabama Undergraduate Research Conference* (April 2015), Matt Bowen received first place and Jacob Zarobsky received third place.

Matt Bowen was selected as a finalist in the ACM Student Research competition at *SIGCSE* (Kansas City, MO, 2015). Matt received second place at this competition.

Christina Noe was selected as a finalist in the ACM Student Research competition at *SIGCSE* (Kansas City, MO, 2015).

At the *ACM Mid-Southeast Conference*, November 2014, Elizabeth Williams was awarded 1<sup>st</sup> place/Doctoral Division.

Jonathan Corley was selected as a finalist in the ACM Student Research competition at *MODELS* (Valencia, Spain, 2014). Jonathan received first place at this competition.

Tarif Haque received the CS Department's *2014 Outstanding Undergraduate Researcher*.

Amber Wagner was selected as a finalist in the ACM Student Research competition at *SIGCSE* (Atlanta, 2014). Amber received second place at this competition.

Cassidy Lamm received third place at the poster contest at the *Southwest Women in Computing Conference* (2013).

At the *ACM Mid-Southeast Conference*, November 2013, Jonathan Corley was awarded 2<sup>nd</sup> place/Doctoral Division; Thomas Lewallen and Joshua Wolfe were awarded Honorable Mention in the Undergraduate division.

Ferosh Jacob was selected as the CS Department's nominee for the *ACM Doctoral Dissertation Competition* (2013)

Amber Krug received the University of Alabama *Graduate Council Research/Creative Activity Fellowship* (2013).

At the *ACM Mid-Southeast Conference*, November 2012, Amber Wagner was awarded 1<sup>st</sup> place/Doctoral Division; Cassidy Lamm and Joshua Wolfe were awarded Honorable Mention in the Undergraduate division.

Ferosh Jacob was selected as a finalist in the ACM Student Research competition at *SPLASH/OOPSLA* (Reno, 2010). Ferosh received third place at this competition.

Yu Sun was selected as a finalist in the ACM Student Research competition at ICSE (Hawaii, 2011). Yu finished in the top-five at this competition (over 60 submissions).

Yu Sun received first place at the 2011 Alabama Academy of Sciences 88<sup>th</sup> meeting in the division of “Engineering and Computer Science.”

Ferosh Jacob was awarded the Best Presentation Award at the *HIPC Student Research Symposium* (Gao, India, December 2010)

Ferosh Jacob received the 2010-2011 ACM Graduate Student Award for the Department of Computer Science at the University of Alabama.

Yu Sun and Robert Tairas were selected as finalists in the ACM Student Research Competition at OOPSLA, sponsored by Microsoft Research (Orlando, 2009).

Served as mentor to the UA team (Justin Graffagnini, Ben Halbach, Joshua Kaufmann, and Christopher McCarty) that was selected as a semi-finalist (with Honorable Mention) for the *Microsoft Imagine Cup* (2012)

Served as mentor to the UA team (Leah Boling, Melissa Bowman, Andrea Torske, Elizabeth Williams) that was selected as a semi-finalist (with Honorable Mention) for the *Microsoft Imagine Cup* (2011)

Served as mentor to the UAB team (Ritu Arora, Yu Sun, and Zekai Demirezen) that was selected as one of 15 teams invited to the *Microsoft Imagine Cup Finals* (Boston, 2009)

Suman Roychoudhury was selected as the CIS Department’s nominee for the *ACM Doctoral Dissertation Competition* (2008)

Robert Tairas was selected as the 2010 recipient of the Dean’s Award (first recipient in the new College of Arts and Sciences at UAB) and the 2010 Outstanding Graduate Student in Computer Science.

Jane Lin was selected as the 2007 recipient of the Dean’s Award (Natural Science and Mathematics)

Yu Sun passed the first-level doctoral exam “With Distinction” (January 2009)

Robert Tairas passed the first-level doctoral exam “With Distinction” (January 2007)

Suman Roychoudhury passed the first-level doctoral exam “With Distinction” (January 2005)

Jing Zhang passed the first-level doctoral exam “With Distinction” (January 2004)

Jane Lin became the first person in our Department’s history to pass the first-level doctoral exam “With Distinction” during her *first* year (January 2003)

Suman Roychoudhury won the “Best Speaker” award at the *2003 Alabama Academy of Science Student Paper Competition* (March 2003)

Yu Sun – 2<sup>nd</sup> Place at the 2008 *UAB Graduate Student Research Day*  
 Robert Tairas – 1<sup>st</sup> (2006) and 3<sup>rd</sup> Place (2007) *UAB Graduate Student Research Day*  
 Jing Zhang – 1<sup>st</sup> Place at the 2005 *UAB Graduate Student Research Day*  
 Suman Roychoudhury - 2<sup>nd</sup> Place (2004 & 2005) *UAB Graduate Student Research Day*

Advisees who received a CRA Undergraduate Honorable Mention:

Bina Shah (2003), Matthew Curry (2004)

At the *ACM Mid-Southeast Conference*, November 2013, Jonathan Corley was awarded 2<sup>nd</sup> place/Doctoral Division, and Thomas Lewallen and Joshua Wolfe were awarded Honorable Mention/Undergraduate Division.

At the *ACM Mid-Southeast Conference*, November 2012, Amber Wagner was awarded 1<sup>st</sup> place/Doctoral Division, and Cassidy Lamm and Joshua Wolfe were awarded Honorable Mention/Undergraduate Division.

At the *ACM Mid-Southeast Conference*, November 2009, Robert Tairas was awarded 2<sup>nd</sup> place/Doctoral Division, Yu Sun was awarded 3<sup>rd</sup> place/Doctoral Division, and Walker Haddock was awarded 2<sup>nd</sup> place/Masters Division.

At the *ACM Mid-Southeast Conference*, November 2007, Amos Smith was awarded 1<sup>st</sup> place in the undergraduate category.

At the *ACM Mid-Southeast Conference*, November 2005, Suman Roychoudhury was awarded 1<sup>st</sup> place/Doctoral Division, Robert Tairas was awarded 1<sup>st</sup> place/Masters Division, and Ruben Vuittonet was awarded 2<sup>nd</sup> place/Undergraduate Division.

From a pool of 15 undergraduates from 7 states, Victoria Davis was awarded 2<sup>nd</sup> place at the *ACM Mid-Southeast Conference*, November 2004.

From a pool of 42 student papers (among numerous institutions in the southeast) at the *ACM Mid-Southeast Conference*, November 2003, Suman Roychoudhury was awarded 3<sup>rd</sup> place in the Doctoral Division, Shairaj Shaik was awarded 1<sup>st</sup> place in the Masters Division, and Pritesh Shah was awarded 2<sup>nd</sup> Place in the Undergraduate Division.

#### *K-12 Student Accomplishments*

All of the following represent high school student accomplishments under my mentorship, including nine Intel/Regeneron ISEF Finalists:

Alabama School of Fine Arts senior Jesse Seidl received Honorable Mention in the Computer Science division at the Central Alabama Regional Science and Engineering Fair (2023).

Alabama School of Fine Arts senior Alex Seidl was the Grand Prize winner of the Central Alabama Science and Engineering Fair; Regeneron ISEF Finalist (2021).

Alberta School of Performing Arts middle school student Maddie Tilford was the winner of the Computer Science division at the UA STEM Showcase and Second Place at the Central Alabama Science and Engineering Fair.

Alabama School of Fine Arts senior Jamarri Green received Honorable Mention in the Computer Science division at the Central Alabama Regional Science and Engineering Fair (2020).

Alabama School of Math and Science junior Cary Xiao: third place in Alabama State Science Fair, US Army Award, IEEE Award and Boeing Award; Intel ISEF Finalist and Oracle Academy Winner.

Alabama School of Fine Arts senior Aiden Yoder received third place (Math and Computer Science) at the Central Alabama Regional Science and Engineering Fair (2019).

Alabama School of Fine Arts senior Arrington Harper received Honorable Mention (Math and Computer Science) at the Central Alabama Regional Science and Engineering Fair (2019).

Alabama School of Fine Arts senior Joshua Holland received Honorable Mention (Math and Computer Science) at the Central Alabama Regional Science and Engineering Fair (2018).

Alabama School of Math and Science junior Kevin Xiao: second place in Alabama State Science Fair, Armed Forces Award, and Directed Energy Award; Intel ISEF Finalist and Oracle Academy Winner.

Alabama School of Fine Arts senior Blayde Dill received Honorable Mention (Math and Computer Science) at the Central Alabama Regional Science and Engineering Fair (2017).

Alabama School of Fine Arts senior Taimur Ghani received Honorable Mention (Math and Computer Science) at the Central Alabama Regional Science and Engineering Fair (2017).

Alabama School of Fine Arts senior Demarcus Campbell received several awards at the state and regional levels and was a Finalist at the Intel International Science and Engineering Fair (ISEF) (2016). He also was awarded first place in the Computer Science division at the regional contest (2016), and the following awards at the State (2016): First Place, Systems Software Category; Alabama Modeling and Simulation Council Award, US Army Science and Engineering Award, Boeing Senior Best in Category Systems Software, Intel Excellence in Computer Science Award, Armed Forces Communications and Electronics Association Award, and the Alpha Kappa Alpha – Epsilon Gamma Omega Chapter, Math & Science.

Alabama School of Fine Arts senior Turner Atwood received several awards at regional levels and was awarded second place in the Computer Science division at the State contest (2016). At the regional contest (2016), Turner was awarded second place in the Computer Science division and also received the Intel Excellence in Computer Science Award.

Alabama School of Fine Arts senior Nath Tumlin received several awards at the state and regional levels: Third Place (Computer Science) at State, Teledyne Brown Engineering Award Senior Computer Best of Show (State), Society of Photo-Optical Instrumentation Engineers 3rd Senior Award (State), Armed Forces Communications & Electronics Association Education Foundation Senior Best of Show (State), Boeing Senior Best Creative Presentation (State), and Third Place (Math and Computer Science) at Regionals. 2015

Alabama School of Fine Arts senior Sruti Josyula received Honorable Mention (Math and Computer Science) at Regionals. 2015

Alabama School of Fine Arts senior Eric Lienert received several awards at the state and regional levels: Second Place (Math and Computer Science) at State, US Army Science and Engineering Award (State), IEEE Huntsville Section Award (State), First Place (Math and Computer Science) at Regionals, Mu Alpha Theta Award (Regional). 2014

Alabama School of Fine Arts senior Devin Sun received several awards at the state and

regional levels: Honorable Mention (Math and Computer Science) at State, Armed Forces Communications and Electronics Association (State), Boeing Award for Best in Computer Science (State), Third Place (Math and Computer Science) at Regionals, Intel Award for Excellence in Computer Science (Regional). 2014

Bob Jones High School student Brandon Steine received Honorable Mention at the 2014 North Alabama Regional Science Fair.

Rebecca Grekin, a previous computer science summer camp attendee from Houston, TX, was awarded a 2013-2014 *Aspirations in Computing* award from NCWIT.

Alabama School of Fine Arts senior Payton Walker was a Finalist at the Intel International Science and Engineering Fair (ISEF) (2013). A list of other awards at regional and state levels include: Third Place (Math and Computer Science) at State, Armed Forces Communications and Electronics Association (State), Boeing Company Award (State), Intel Excellence in Computer Science Award (State), Teledyne Brown Engineering Award (State), First Place (Math and Computer Science) at Regionals, Intel Award for Excellence in Computer Science (Regional), Intel Best of Show award (Regional). 2013

Alabama School of Fine Arts senior Casey Barnett received several awards at the state and regional levels: Third Place (Math and Computer Science) at State, Armed Forces Communications and Electronics Association (State), Intel Award for Excellence in Computer Science Award (State), Third Place (Math and Computer Science) at Regionals, Intel Award for Excellence in Computer Science (Regional).

LAMP senior Neil Windon received several awards at the state and regional levels: US Navy/US Marine Award (State), Second Place (Engineering, Math and Computer Science) at Regionals.

Alabama School of Fine Arts senior Anshu Bansal was awarded First Place (Math and Computer Science) at the 2012 Alabama State Science and Engineering Fair. He was also awarded the Intel Excellence in Computer Science Award, Mu Alpha Theta Award, IEEE Huntsville Section Award, Alabama Modeling and Simulation Council Award, and 1<sup>st</sup> Place in the Computer Science Division. At the 2012 Central Alabama Regional Science Fair, Anshu was awarded Third Place (Math and Computer Science), as well as the APEX Outstanding Engineering Award, and the Outstanding Computer Science Award.

Alabama School of Fine Arts junior Jefferson Zou was awarded Honorable Mention (Mathematics and Computer Science) at the 2012 Central Alabama Regional Science Fair.

Alabama School of Fine Arts senior Caitlin Marsh was awarded First Place - Math and Computer Science - at the Central Alabama Regional Science Fair (2011). At the 2011 Alabama State Science and Engineering Fair, she was awarded the Intel Excellence in Computer Science Award, the US Science and Engineering Award, and 4<sup>th</sup> Place in the Computer Science Division.

Alabama School of Fine Arts senior James Yarbrough was awarded Third Place - Math and Computer Science - at the Central Alabama Regional Science Fair (2011). At the 2011 Alabama State Science and Engineering Fair, he was awarded the Teledyne Brown Engineering Award, the Armed Forces Communications and Electronics Association Educational Foundation Award, the Sigma Xi Outstanding Research Project Award, the UAH Director's Award, and 3<sup>rd</sup> Place in the Computer Science Division. James was also a Silver Medalist at the International Sustainable World (Energy, Engineering, and Environment) Project Olympiad in Houston, TX, May 2011.

Alabama School of Fine Arts seniors Jemale Lockett and Omar Ismail were Finalists in the Team Division at the Intel International Science and Engineering Fair (ISEF) (2010). A list of their awards at regional and state levels include: First Place - Team Division (State), First Place - Armed Forces Communications and Electronics Association (State), First Place - ISEF Finalist (State), US Army Science and Engineering Award (State), First Place - Team Division (Regional).

Alabama School of Fine Arts senior Wisdom Chen was a Finalist at the Intel International Science and Engineering Fair (ISEF) (2010). A list of his awards at regional and state levels include: First Place - Intel Excellence in Computer Science (State), Third Place - Computer Science (State), First Place - Math and Computer Science (Regional), First Place - ISEF Finalist (Regional), First Place - Intel Excellence in Computer Science (Regional).

Mountain Brook High School seniors Robert Smyly and Oliver White were awarded 3<sup>rd</sup> place overall in the Team Category at the Central Alabama Regional Science Fair (2009). They also received Honorable Mention in the Team Category at the Alabama State Science Fair (2009).

Mountain Brook High School junior Robert Smyly was awarded the “Intel Excellence in Computer Science Award” at the Central Alabama Regional Science Fair (2008).

Mountain Brook High School sophomore William Whitney won first place in computer science at the Alabama State Science and Engineering Fair (2007). He also won four other awards at the state level, including the IEEE Computer Science award. At the qualifying Central Alabama Regional Science Fair (2007), Will was awarded second place in computer science, engineering, and mathematics.

Mountain Brook High School junior George Tankersley was awarded the “Intel Excellence in Computer Science Award” and the “Yale Science Award” at the Central Alabama Regional Science Fair (2007).

Mountain Brook High School senior Jerrod Sutton won three awards at the Central Alabama Regional Science Fair (2006) and was invited to compete at the Alabama State Science Fair, where he received an additional three awards.

*UAB  
Undergraduate  
Research*

Assisted in the recruitment and advising of students for the NSF sponsored *Summer Internship Program in Hybrid and Embedded Research* (SIPHER) that is hosted by Vanderbilt University and UC Berkeley.

Assisted in the recruitment of UAB students for the NSF REU on Pervasive and Mobile Computing, hosted by University of Alabama at Tuscaloosa (Summer 2003, 2004, 2005, and 2006) and Auburn (2007)

- K-12 Activities*
- Co-chair, Governor Kay Ivey's Computer Science Advisory Council (2017-present)
  - College Board AP CS Principles Co-Chair, Development Committee (2023-present)
    - College Board AP CS Principles Development Committee (2021-2022)
  - Executive Committee, *Governor Kay Ivey's Alabama STEM Council* (2020-present)
  - Board of Trustees, *Alabama School of Cyber Technology and Engineering* (2018-present)
  - Saban Center, Professional Development and Curriculum Team (2022-present)
  - Advisory Board Member, *Governor Kay Ivey's Advisory Council for Excellence in STEM (ACES)* (2019).
  - Co-chair of the *K-12 Science Committee*, commissioned by the Alabama State Department of Education (2017)
  - Advisory Committee for the University of Alabama *STEM Showcase* (middle school science fair) (2020-present)
  - Coordinator and Teacher of the *UA CS Summer Camps* (2011-present)
  - Contest Director of the *Alabama Robotics Competition* (2011-present)
  - Standards committee writer for the *Course of Study on Digital Learning and Computer Science*, commissioned by the Alabama State Department of Education (2017-2018)
  - Co-Founder and workshop trainer of CSPdWeek, the largest Computer Science Professional Development event for K-12 Computer Science Teachers, 2016-2017
  - Organized and taught a MOOC as a course with support from *Google Computer Science for High School* (CS4HS), over 2,500 teachers registered (49 states and 12 countries), (2014 and 2015), <https://csp-cs4hs.appspot.com/>
  - Participated in a feature story in the ACM Pathways report, "Rebooting the Pathway to Success: Preparing Students for Computing Workforce Needs in the United States," Spring 2014, [pathways.acm.org](http://pathways.acm.org)
  - Organized and taught six separate years of a *Google Computer Science for High School* (CS4HS) workshop for teachers in Alabama and the Southeast on the topic of the CS Principles course, 2011-2016
  - Collaborated with the Alabama State Department of Education to include CS Principles and AP CS A as official courses that count as math credits for high school graduation in Alabama; Alabama became the 16<sup>th</sup> state in the US to offer graduation credit for Computer Science, December 2013.
  - Served as Editor for the College Board for the CS Principles Teaching Guides (2012-2014)
  - Collaborated with the Alabama State Department of Education to get the CS Principles course as an official course on the Alabama Course of Study; Alabama became the first state in the US to formally recognize CS Principles as a formally coded course, January 2013.
  - Organized a day-long Professional Development session for Tuscaloosa City School



teachers (January 2013)

Organized the *Alabama Robotics Workshop* for K-12 teachers throughout Alabama (November 2011)

Coordinator of Score Keeping – Shelton State BEST Robotics competition (2012-2016)

Contest Director of the *UAB High School Programming Contest* (2005-2009)

Contest Director of the *UAB Alice Film Festival* (2007-2009)

Recruiting Director and Teacher of the *UAB CIS Summer Camps* (2004-2009)

Organized an Alice Workshop (with Dr. Wanda Dann) that brought over 35 Alabama K-12 teachers to UAB (May 2009)

Organized the first *Alabama K-12 Computer Science Teachers Workshop* at UAB (July 2006)

Organized and Hosted Dr. Tim Bell for the *Computer Science Unplugged* event at the McWane Center (2007)

Coordinator of Score Keeping - UAB Blazer BEST Robotics competition (2008-2009)

Frequent speaker at K-12 meetings and school events (see *Invited Presentations/Outreach Meetings* under the *Publications* section)

Faculty Associate of the Auburn Computer Literacy Camp for Children (2007)

Assisted in initiating the Engineering Academy at Gardendale High School; bi-weekly lectures on robotics and Alice (Fall 2007-2009)

Initiated a series of talks on “Introduction to Game Programming with Alice” to the Gardendale High School Technology Club (meets twice a month, 2006-2007)

Hosted a half-day field trip to the UA CS Department:

- Hoover High School (February 24, 2020)
- Florence High School (September, 4, 2015)
- Sylacauga High School (May 7, 2015)
- Hale County STEM Middle School Team (August 29, 2014)
- Lawrence County High School (November 22, 2013)
- Muscle Shoals High School (October 5, 2011)
- McAdory High School (October 27, 2010)
- Tuscaloosa Explorer Scouts (April 12, 2010)
- Spain Park High School (April 9, 2010)

Hosted a half-day field trip to the UAB CIS Department:

- Ft. Payne High School (November 20, 2009)
- Clay-Chalkville High School (September 25, 2009)
- Vestavia Hills High School (April 3, 2009)
- Everest Academy and Calvary Christian Schools (November 14, 2008)
- Morgan Academy, Selma, AL (October 3, 2008)
- Prattville High School (August 31, 2007)
- Vestavia Hills High School and the Altamont School (November 3, 2006)
- Neighborhood Housing Services of Birmingham (October 14, 2006)
- Fultondale High School (September 15, 2006)

Collaboration with the Heritage Center to provide summer internship opportunities to economically disadvantaged high-school students (<http://www.cis.uab.edu/heritage>).

Served as trainer for the *Black Data Processing Association* (BDPA) High School Computer Competition, 2006

Led the recruitment of high school students for the UAB DUAL program (2005). Sally Tao and Jia Zhang became the first students sponsored by the CIS department. The DUAL program permits high school students to take an accelerated course at UAB for college credit.

Organized the CIS Department's representation at *Birmingham Parents Fair*, 2005-2007

Assisted in the CIS Department Summer Computer Camp by providing a lecture on software engineering and aspect-oriented programming, 2003.

*UA University  
Service*

*University of Alabama General Education Taskforce* (2018-2023)

Coordinator of the University of Alabama nomination committee for the *Barry Goldwater Scholarship and Excellence in Education Foundation* (2023-present)

Advisory Committee, *University Honors College Committee on External Scholarships and Fellowships* (2020-present)

- Goldwater selection committee (2020-2022)
- Truman interview committee (2022-present)

Selection Committee, *Randall Premier Award* (2021-present)

Advisory Board, *University of Alabama Youth Protection Committee* (2020-present)

Advisory Board, *University of Alabama Office of Undergraduate Research* (2019-present)

Advisory Board, *University of Alabama Division of Community Affairs* (2017-present)

NCWIT Affiliate Director for the University of Alabama and coordinator of the North Alabama Regional Aspirations Award (2015-present)

University Teachers Education Council, 2015-present

College of Education Faculty Search Committee (2020)

Project Lead the Way (PLTW) Affiliate Director for the University of Alabama (2015-2018)

University of Alabama STEM Committee, (2016-present)

Faculty and Staff Benefits Committee, 2010-2012

Host the recruiting visits of approximately 30 high school students each year

University Research Grants Committee (Engineering Representative), 2011-2014

Reviewer for the University of Alabama STEM Seed Program, 2013-2015

Invited Presenter at UA NSF CAREER Workshop, 2012 and 2013

*UA Honors  
Service*

Honors College Faculty Annual Review Committee (2022-present)

*UA Engineering  
School Service*

College of Engineering Faculty Learning Committee (2020)

College of Engineering Promotion and Tenure Committee (2015-present)

Assisted with E-Day event (2010-present)

Undergraduate Research Committee (CS Representative), 2011-present

Panel session at Capstone Scholars Day (2011-present)

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<i>UA CS Department Service</i>	Department of Computer Science Promotion and Tenure Committee (2015-present)  Coordinator for the Department Colloquium Series, 2010-2022  Coach of the Department ACM Programming Contest Team, 2011-2013  Faculty Search Committee (2010, 2011, 2015, 2016, 2020)
<i>UAB University Service</i>	Delivered the Faculty Perspectives talk at the <i>UAB Scholars Symposium</i> , Alys Stephens Jemison Concert Hall, August 20, 2009.  Interviewer for UAB Science and Technology Honors Program, 2009  Department of Biology Textbook Review Committee, 2009  Member of the Responsible Conduct of Research (RCR) project, 2007  Natural Sciences and Mathematics Faculty Affairs Committee, 2007-2009
<i>UAB CIS Department Service</i>	Chair of the Department Outcomes Assessment Committee, 2007-2009  Coordinator of the CIS Department's K-12 Outreach efforts, 2005-2009  Coordinator for the M.S. Software Engineering Specialization, 2005-2009  CIS Department Faculty Affairs Committee, 2007-2009  CIS Department Graduate Admissions Committee, 2007-2009  Coordinator for the Department Seminar Series, 2002-2006  Coordinator for the CIS 201 Introduction to Java Course, 2007-2009  Coordinator for the CIS 420/520 Software Engineering Course, 2004-2008  Department Nomination Committee for Undergraduate Fellowships, 2003-2009  Coordinator of the Software Engineering section of the Ph.D. Qualifying exam  Coach of the Department ACM Programming Contest Team, 2004 and 2005.  Organized Department trip (30 students) to the Honda Plant (October 2004)  Organized Department trip (20 students) to CTS (January 2005, February 2006)

## Honoraries & Memberships

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<i>Honoraries</i>	Phi Kappa Phi (Life Member) Phi Beta Kappa Golden Key National Honor Society	
<i>Memberships</i>	Association for Computing Machinery Distinguished Member Senior Member Member Student Member	<i>2014-present</i> <i>2012-2013</i> <i>2003-2011</i> <i>1988-2002</i>
	IEEE Computer Society Senior Member Member Student Member	<i>2006-present</i> <i>2003-2005</i> <i>1988-2002</i>
	Mensa	<i>1995-present</i>
	American Society for Engineering Education	<i>2012-present</i>
	Sigma Xi (The Scientific Research Society)	<i>2008-2011</i>

## Experience

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### Research and Professional Experience

<i>April 2002- July 2002</i>	<b>VANDERBILT UNIVERSITY</b>  Research Associate, DARPA PCES project	<b>Institute for Software Integrated Systems (ISIS)</b>  <i>Nashville, TN</i>
<i>February 1999- March 2002</i>	<b>VANDERBILT UNIVERSITY</b>  Research Assistant on DARPA PCES project, investigating application of Aspect-Oriented Programming with Model Integrated Computing; Investigated tool integration for Boeing.	<b>Institute for Software Integrated Systems (ISIS)</b>  <i>Nashville, TN</i>
<i>Summer 1997- January 1999</i>	<b>ASPECT COMMUNICATIONS</b>  Lead developer on the TCS Schema Manager; developed components and tools to help support the effort to internationalize the TCS flagship product; created the database exception handler; offered several presentations on UML and Delphi.	<b>TCS</b>  <i>Brentwood, TN</i>
<i>Summer 1996</i>	<b>IBM TJ WATSON RESEARCH CENTER</b>  Conducted research in reusable software components (e.g., OLE, OpenDoc, Java); delivered a technical presentation; offered a tutorial on HTML and CGI.	<i>Yorktown Heights, NY</i>

<i>Spring 1996</i>	<b>STATE OF TENNESSEE</b>	<b>Department of Finance &amp; Administration</b>
	Aided in the identification and implementation of distributed business objects that were used throughout the enterprise of the State of Tennessee. Built the first prototype of an external web page for the State of Tennessee.	<i>Nashville, TN</i>
<i>Summer 1995</i>	<b>VANDERBILT UNIVERSITY</b>	<b>Associate Provost's Office</b>
	Assisted in the development of Vanderbilt's budgeting system. I was responsible for constructing the installation software and documentation that resided on 5 servers, facilitating installation to over 200 sites; tested the main application for faults and memory leaks.	<i>Nashville, TN</i>
<i>Spring 1992- Spring 1993</i>	<b>WEST VIRGINIA UNIVERSITY</b>	<b>Department of Computer Science</b>
	Served as a Research Assistant on a DARPA contract that investigated issues pertaining to software reuse.	<i>Morgantown, WV</i>
<i>Fall 1989- Spring 1990</i>	<b>WEST VIRGINIA UNIVERSITY</b>	<b>Department of Computer Science</b>
	Served as an Undergraduate Research Assistant (as a sophomore) on a contract from TRW that investigated functional testing of Ada software.	<i>Morgantown, WV</i>
<b>Teaching Experience</b>		
<i>Fall 1993- Spring 1997</i>	<b>VANDERBILT UNIVERSITY</b>	<b>Department of Computer Science</b>
	Teaching Assistant assigned to CS100. I had complete responsibility for the sections that I taught.	<i>Nashville, TN</i>
<i>Fall 1991- Spring 1993</i>	<b>WEST VIRGINIA UNIVERSITY</b>	<b>Department of Computer Science</b>
	Served as a Teaching Assistant for various freshmen and sophomore level laboratories.	<i>Morgantown, WV</i>
<i>Professional Development</i>	Complete training in "Cooperative Learning Structures Level 1," <i>Kagan Cooperative Learning Institute</i> , Dallas, TX, January 17-20, 2014.	
	Participant in the <i>Seldin Teaching Portfolio Mentoring Workshop</i> , Birmingham, AL, May 2-5, 2006.	
	Participant in the <i>UAB Master Teaching Program</i> workshop, Birmingham, AL, April 27-28, 2006.	
	Participant in the Computing Research Association's workshop on <i>Academic Careers and Effective Teaching</i> , Washington, DC, February 23-24, 2004.	
	Participant in the New Software Engineering Faculty Symposium (NSEFS), <i>International Conference on Software Engineering (ICSE)</i> , Portland, OR, May 5 2003.	
	Participant in the Vanderbilt Center for Teaching's Future Faculty Preparation Program (F2P2).	

**Miscellaneous**

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*Other*

My Erdős number is 3 (several different 4 and 5 paths):  
Erdős, Paul -> Laskar, Renu -> Sprague, Alan -> Me