

# Robby, Ph.D.

Curriculum Vitae

October 31, 2009

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Associate Professor  
Department of Computing and Information Sciences  
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## Academic Background

**Ph.D.:** Computer Science, *Kansas State University*, Manhattan, Kansas, USA (2000 – 2004)

Thesis entitled “Domain-specific Software Model Checking”.

Supervised by John Hatcliff and Matthew B. Dwyer.

**M.S.:** Computer Science, *Kansas State University*, Manhattan, Kansas, USA (1999 – 2000)

Thesis entitled “Bandera Specification Language: A Specification Language for Software Model Checking”.

Supervised by John Hatcliff.

**B.S.:** Computer Science, *Oklahoma State University*, Stillwater, Oklahoma, USA (1997 – 1998)

(Universitas Pelita Harapan, Karawaci, Indonesia, 1995 – 1997)

## Interests

### Research Interests

Software verification, specification, analysis, transformation, specialization, testing, software engineering, model-driven software development

### Teaching Interests

Specification and verification of software, programming languages, compiler design

## Experience

### Research Experience

**July 2009 – present:** Associate Professor, Department of Computing and Information Sciences, Kansas State University.

**August 2004 – June 2009:** Assistant Professor, Department of Computing and Information Sciences, Kansas State University.

**August 2001 – July 2004:** Research Assistant, Department of Computing and Information Sciences, Kansas State University.

**May 2001 – August 2001:** Research Intern, Microsoft Research, Microsoft, Redmond, Washington.

**January 1999 – May 2001:** Research Assistant, Department of Computing and Information Sciences, Kansas State University.

**May 1998 – December 1998:** Research Assistant, Department of Plant and Soil Sciences, Oklahoma State University.

### Teaching Experience

**August 2004 – present:** Taught courses on compiler design, software specification, and software verification (graduate).

**August – December 2001, January – May 2008:** Taught a course on organization of programming languages (undergraduate).

### Scientific Record

#### Invited and Reviewed Papers

- “Formal Software Analysis: Emerging Trends in Software Model Checking”, Matthew B. Dwyer, John Hatcliff, Corina Păsăreanu, Robby, Willem Visser. In the *Proceedings of the 29th International Conference on Software Engineering, Future of Software Engineering Track (ICSE FoSE)*, 2007. IEEE Computer Society, pp. 120 – 136.
- “Bogor: A Flexible Framework for Creating Software Model Checkers”, Robby, Matthew B. Dwyer, John Hatcliff. In the *Proceedings of the 2006 Testing: Academia and Industry Conference - Practice and Research Techniques (TAIC PART)*, 2006. IEEE Computer Society, pp. 3 – 22.
- “Domain-specific Model Checking Using The Bogor Framework”, Robby, Matthew B. Dwyer, John Hatcliff. In the *Proceedings of the Twenty First International Conference on Automated Software Engineering (ASE)*, 2006. IEEE Computer Society, pp. 369 – 370 (tutorial summary).
- “A Case Study in Domain-customized Model Checking for Real-time Component Software”, Matthew Hoosier, John Hatcliff, Robby, Matthew B. Dwyer. In the *Proceedings of the First International Symposium on Leveraging Applications of Formal Methods (ISoLA)*, 2004. Lecture Notes in Computer Science (LNCS) 4313, pp. 161 – 180.
- “A Flexible Framework for the Estimation of Coverage Metrics in Explicit State Software Model Checking”, Edwin Rodríguez, Robby, Matthew B. Dwyer, John Hatcliff. In the *Proceedings of the 2004 Workshop on Construction and Analysis of Safe, Secure and Interoperable Smart Devices (CASSIS)*, 2004. Lecture Notes in Computer Science (LNCS) 3362, pp. 210 – 228.
- “Supporting Model-driven Development of Component-based Embedded Systems with Cadena”, Adam Childs, Xianghua Deng, Matthew B. Dwyer, Jesse Greenwald, John Hatcliff, Prashant Kumar, Georg Jung, Venkatesh Ranganath, Robby, Gurdip Singh. In the *Proceedings of 2003 Workshop on Specification and Verification of Component-Based Systems (SAVCBS)*, September, 2003. Helsinki, Finland. Technical Report #03-11, Department of Computer Science, Iowa State University. pp. 3 – 4.

- “Slicing and Partial Evaluation of CORBA Component Model Designs for Avionics System”, John Hatcliff, William Deng, Matthew B. Dwyer, Georg Jung, Venkatesh Prasad Ranganath, Robby. In the *Proceedings of the 2003 ACM SIGPLAN Workshop on Partial Evaluation and Semantics-based Program Manipulation (PEPM)*, June, 2003. ACM Press, pp. 1 – 2.
- “Model-checking Middleware-based Event-driven Real-time Embedded Software”, William Deng, Matthew B. Dwyer, John Hatcliff, Georg Jung, Robby, Gurdip Singh. In the *Proceedings of the First International Symposium on Formal Methods for Components and Objects (FMCO)*, 2002. Lecture Notes in Computer Science (LNCS) 2852, pp. 154 – 181.

### Refereed Journals

- “Checking JML Specifications Using An Extensible Software Model Checking Framework”, Robby, Edwin Rodríguez, Matthew B. Dwyer, John Hatcliff. In *International Journal on Software Tools for Technology Transfer (STTT)*, 2006. Volume 8, Issue 3, pp. 280 – 299.
- “Exploiting Object Escape and Locking Information in Partial Order Reduction for Concurrent Object-Oriented Programs”, Matthew B. Dwyer, John Hatcliff, Robby, Venkatesh R. Prasad. In *International Journal on Formal Methods in System Design Journal (FMSD)*, 2004. Volume 25, Number 2 – 3, pp. 199 – 240.
- “Expressing Checkable Properties of Dynamic Systems: The Bandera Specification Language”, James C. Corbett, Matthew B. Dwyer, John Hatcliff, Robby. In *International Journal on Software Tools for Technology Transfer (STTT)*, 2002. Volume 4, Number 1, pp. 34 – 56.

### Book Chapters

- “Foundations of the Bandera Abstraction Tools”, John Hatcliff, Matthew B. Dwyer, Corina S. Pasareanu, Robby. *The Essence of Computation. Complexity, Analysis, Transformation : Essays Dedicated to Neil D. Jones*, 2002. Lecture Notes in Computer Science (LNCS) 2566, pp. 172 – 203.

### Refereed Conference Proceedings

- “Sireum/Topi LDP: A Lightweight Semi-Decision Procedure for Optimizing Symbolic Execution-based Analysis”, Jason Belt, Robby, Xianghua Deng. In the *Proceedings of the 7th joint meeting of the European Software Engineering Conference (ESEC) and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE)*, 2009. ACM Press, pp. 355 – 364. Acceptance 15%.
- “agentTool Process Editor: Supporting the Design of Tailored Agent-based Processes”, Juan Carlos Garcia-Ojeda, Scott A. DeLoach, Robby. In the *Proceedings of the 24th Annual ACM Symposium on Applied Computing (ACM SAC 2009) – Agent-Oriented Software Engineering Methodologies and Processes (AOMP) Track*, 2009. ACM Press, pp. 707 – 714. Acceptance 30%.
- “Leveraging Organizational Guidance Policies with Learning to Self-Tune Multiagent Systems”, Scott Harmon, Scott A. DeLoach, Robby, Doina Caragea. In the *Proceedings of the Second IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)*, 2008. IEEE Computer Society Press, pp. 223 – 232. Acceptance 27%.

- “Specification and Checking of Software Contracts for Conditional Information Flow”, Torben Amtoft, John Hatcliff, Edwin Rodríguez, Robby, Jonathan Hoag, David A. Greve. In the *Proceedings of the Fifteenth International Symposium on Formal Methods(FM)*, 2008. Lecture Notes in Computer Science (LNCS) 5014, pp. 229 – 245. Acceptance 22%.
- “Towards A Case-Optimal Symbolic Execution Algorithm for Analyzing Strong Properties of Object-Oriented Programs”, Xianghua Deng, Robby, John Hatcliff. In the *Proceedings of the Fifth IEEE International Conference on Software Engineering and Formal Methods (SEFM)*, 2007. IEEE Computer Society, pp. 273 – 282.
- “Kiasan/KUnit: Automatic Test Case Generation and Analysis Feedback for Open Object-oriented Systems”, Xianghua Deng, Robby, John Hatcliff. In the *Proceedings of the 2007 Testing: Academic & Industrial Conference – Practice and Research Techniques (TAIC PART)*, 2007. IEEE Computer Society, pp. 3 – 12.
- “Bogor/Kiasan: A  $k$ -bounded Symbolic Execution for Checking Strong Heap Properties of Open Systems”, William Deng, Jooyong Lee, Robby. In the *Proceedings of the Twenty First International Conference on Automated Software Engineering (ASE)*, 2006. IEEE Computer Society, pp. 157 – 166. Acceptance 18%.
- “Using Design Metrics for Predicting System Flexibility”. Robby, Scott A. DeLoach, Valeriy A. Kolesnikov. In the *Proceedings of the Ninth International Conference on Fundamental Approaches to Software Engineering (FASE)*, 2006. Lecture Notes in Computer Science (LNCS) 3922, pp. 184 – 198. Acceptance 17%.
- “Evaluating the Effectiveness of Slicing for Model Reduction of Concurrent Object-Oriented Programs”. Matthew B. Dwyer, John Hatcliff, Matthew Hoosier, Venkatesh P. Ranganath, Robby, Todd Wallentine. In the *Proceedings of the Twelfth International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS)*, 2006. Lecture Notes in Computer Science (LNCS) 3920, pp. 73 – 89. Acceptance 27%.
- “Extending Sequential Specification Techniques for Modular Specification and Verification of Multi-Threaded Programs”, Edwin Rodríguez, Matthew B. Dwyer, Cormac Flanagan, John Hatcliff, Gary T. Leavens, Robby. In the *Proceedings of the Nineteenth International Conference on European Conference on Object-Oriented Programming (ECOOP)*, 2005. Lecture Notes in Computer Science (LNCS) 3586, pp. 551 – 576. Acceptance 14%.
- “Analyzing Interaction Orderings with Model Checking”, Matthew B. Dwyer, Robby, Oksana Tkachuk, Willem Visser. In the *Proceedings of the Nineteenth International Conference on Automated Software Engineering (ASE)*, 2004. IEEE Computer Society, pp. 154 – 163. Acceptance 14%.
- “Checking Strong Specifications Using An Extensible Software Model Checking Framework”, Robby, Edwin Rodríguez, Matthew B. Dwyer, John Hatcliff. In the *Proceedings of the Tenth International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS)*, 2004. Lecture Notes in Computer Science (LNCS) 2988, pp. 404 – 420. Acceptance 25%.
- “Verifying Atomicity Specifications for Concurrent Object-Oriented Software using Model Checking”, John Hatcliff, Robby, Matthew B. Dwyer. In the *Proceedings of the Fifth International*

*Conference on Verification, Model Checking and Abstract Interpretation (VMCAI)*, 2004. Lecture Notes in Computer Science (LNCS) 2937, pp. 175 – 190. Acceptance 33%.

- “Space Reductions for Model Checking Quasi-Cyclic Systems”, Matthew B. Dwyer, Robby, William Deng, John Hatcliff. In the *Proceedings of the Third International Conference on Embedded Software (EMSOFT)*, October, 2003. Lecture Notes in Computer Science (LNCS) 2855, pp. 173 – 189. Acceptance 34%.
- “Bogor: An Extensible and Highly-Modular Model Checking Framework”, Robby, Matthew B. Dwyer, John Hatcliff. In the *Proceedings of the Fourth Joint Meeting of the European Software Engineering Conference and ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE)*, September, 2003. ACM Press, pp. 267 – 276. Acceptance 19%.
- “Tool-supported Program Abstraction for Finite-state Verification”, Matthew B. Dwyer, John Hatcliff, Roby Joehanes, Shawn Laubach, Corina Pasareanu, Robby, Willem Visser, Hongjun Zheng. In the *Proceedings of the 2001 International Conference on Software Engineering (ICSE)*, May, 2001. IEEE Computer Society, pp. 177 – 187. Acceptance 17%.
- “Bandera : Extracting Finite-state Models from Java Source Code”, James Corbett, Matthew B. Dwyer, John Hatcliff, Corina Pasareanu, Robby, Shawn Laubach, Hongjun Zheng. In the *Proceedings of the International Conference on Software Engineering (ICSE)*, May 2000, IEEE Computer Society, pp. 439 – 448. Acceptance 14%.

#### Refereed Workshop Proceedings

- “Preliminary Design of a Unified JML Representation and Software Infrastructure”, In the *Proceedings of the Eleventh Workshop on Formal Techniques for Java-like Programs (FTfJP)*, 2009.
- “Trace-based Specification of Law and Guidance Policies for Multiagent Systems”, Scott Harmon, Scott A. DeLoach, Robby. In the *Proceedings of the Eight Annual International Workshop on Engineering Societies in the Agents World (ESAW)*, 2007. Lecture Notes in Computer Science (LNCS) 4995, pp. 333 – 349.
- “O-MaSE: A Customizable Approach to Developing Multiagent Processes”, Juan Carlos Garcia-Ojeda, Scott A. DeLoach, Robby, Walamitien H. Oyenon, Jorge Valenzuela. In the *Proceedings of the Eight International Workshop on Agent Oriented Software Engineering (AOSE)*, 2007. Lecture Notes in Computer Science (LNCS) 4951, pp. 1 – 15.
- “Supporting Model Checking Education using Bogor/Eclipse”, Matthew B. Dwyer, John Hatcliff, Robby. In the *Proceedings of the Eclipse Technology eXchange Workshop at the ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications (eTX/OOPSLA)*, 2004.
- “Space-Reduction Strategies for Model Checking Dynamic Systems”, Robby, Matthew B. Dwyer, John Hatcliff, Radu Iosif. In the *Proceedings of the 2003 Workshop on Software Model Checking (SoftMC)*, 2003. Electronic Notes in Theoretical Computer Science (ENTCS), Volume 89, Issue 3.
- “A Language Framework For Expressing Checkable Properties of Dynamic Software”, James Corbett, Matthew B. Dwyer, John Hatcliff, Robby. In the *Proceedings of the 2000 SPIN Workshop*. August, 2000. Lecture Notes in Computer Science (LNCS) 1885, pp. 205 – 223.

## Refereed Conference Tool and Short Papers

- “Abstract Requirement Analysis in Multiagent System Design”, Scott Harmon, Scott A. DeLoach, Robby. To appear in the *Proceedings of the 2009 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT 2009)*.
- “agentTool III: From Process Definition to Code Generation”, Juan Carlos Garcia-Ojeda, Scott A. DeLoach, Robby. In the *Proceedings of the 8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2009)*, Volume 2, May, 2009. IFAAMAS, pp. 1393 – 1394.
- “From Abstract Qualities to Concrete Specification using Guidance Policies”, Scott Harmon, Scott A. DeLoach, Robby. In the *Proceedings of the 8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2009)*, Volume 2, May, 2009. IFAAMAS, pp. 1343 – 1344.
- “Building Your Own Software Model Checker Using The Bogor Extensible Model Checking Framework”, Matthew B. Dwyer, John Hatcliff, Matthew Hoosier, Robby. In the *Proceedings of the 17th International Conference on Computer Aided Verification (CAV)*, July, 2005. Lecture Notes in Computer Science (LNCS) 3576, pp. 148 – 152.
- “Bandera: A Source-level Interface for Model Checking Java Programs”, James Corbett, Matthew B. Dwyer, John Hatcliff, Robby. In the *Proceedings of the 2000 International Conference on Software Engineering (ICSE)*, May, 2000, IEEE Computer Society, pp. 762 – 765.

## Professional Organization Newsletters

- “Bogor: An Extensible Framework for Domain-Specific Model Checking”, John Hatcliff, Matthew B. Dwyer, Robby. In the *Newsletter of European Association of Software Science and Technology (EASST)*, 2004.

## Technical Reports

- “Towards an Industrial Grade IVE for Java and Next Generation Research Platform for JML”, Patrice Chalin, Robby, Perry R. James, Jooyong Lee, George Karabotsos. *Technical Report SAnToS-TR2009-10-01*, SAnToS Laboratory, Department of Computing and Information Sciences, Kansas State University.
- “Efficient Symbolic Execution Algorithms for Programs Manipulating Dynamic Heap Objects”, Xianguhua Deng, Jooyong Lee, Robby. *Technical Report SAnToS-TR2009-09-25*, SAnToS Laboratory, Department of Computing and Information Sciences, Kansas State University.
- “Enabling Efficient Partial Order Reductions for Model Checking Object-Oriented Programs Using Static Calculation of Program Dependences”, Venkatesh P. Ranganath, John Hatcliff, Robby. *Technical Report SAnToS-TR2007-2*, SAnToS Laboratory, Department of Computing and Information Sciences, Kansas State University.

## Grants

- Air Force Office of Scientific Research (AFOSR), *Evidence-based Trust in Large-scale MLS Systems*, with John Hatcliff (lead PI), Torben Amtoft, and Xinming Ou; Andrew Appel and Edward Felten (Princeton University); March 2009 – November 2014, \$3,000,000 (K-State’s portion: \$2,012,500).

- National Science Foundation (NSF) CNS-0932289, *CPS:Medium:Collaborative Research:Infrastructure and Technology Innovations for Medical Device Coordination*, with John Hatcliff (lead PI), Daniel Andresen, and Steven Warren; Insup Lee and Oleg Sokolsky (University of Pennsylvania); September 2009 - August 2012, \$1,500,000 (K-State's portion: \$840,000).
- National Science Foundation (NSF) CCF-0644288, *CAREER: A Formal, Integrated Analysis Framework for Contract-based Reasoning of Strong Properties of Open Systems*, April 2007 – March 2012, \$400,000.
- Rockwell Collins Advanced Technology Center, *A Domain Specific Language for Defining High-Assurance Secure-Network Guards*, with John Hatcliff (lead PI), Torben Amtoft, and Xinming Ou, September 2008 - August 2010, \$170,000.
- National Science Foundation (NSF) CNS-0709169, *Collaborative Research: CRI:CRD: A JML Community Infrastructure – Revitalizing Tools and Documentation to Aid Formal Methods Research*, with Gary T. Leavens (lead PI, University of Central Florida, CNS-0808913); Samik Basu, Hridesh Rajan (Iowa State University, CNS-0709217); Yoonsik Cheon (University of Texas at El Paso, CNS-0707874); Curtis Clifton (Rose-Hulman Institute, CNS-0707701); Cormac Flanagan (University of California at Santa Cruz, CNS-0707885); David A. Naumann (Stevens Institute of Technology, CNS-0708330); July 2007 – June 2010, \$895,000 (K-State's portion: \$220,000).
- Air Force Office of Scientific Research (AFOSR), *Organization-based Model-driven Development of High-assurance Multiagent Systems*, with Scott A. DeLoach (lead PI), January 2006 – November 2008, \$481,824.
- National Science Foundation (NSF) CNS-0734204, *Development of an Open Test-bed for Application of Formal Methods to Plug and Play Medical Devices*, with John Hatcliff (lead PI), Daniel Andresen, Steve Warren (EECE), September 2007 – August 2009, \$55,000.
- Lockheed Martin Advanced Technology Laboratories, *Analysis and Verification of Large Scale .Net Application Models*, June 2006 – December 2006, \$50,000; May 2007 – December 2007, \$60,000.
- IBM Eclipse Innovation Grant, *Integrating Java Modeling Language (JML) in Eclipse*, 2005, \$27,000.
- IBM Eclipse Innovation Grant, *Tool-support for Project-oriented Model Checking Education*, PIs: Robby, Matthew B. Dwyer and John Hatcliff, 2004, \$25,000 (written with research advisors during graduate study).
- National Science Foundation (NSF) CCF-0306607/0444167, *BOGOR: A Model Checking Framework for Dynamic Software*, PIs: Matthew B. Dwyer and John Hatcliff, June 2003 – May 2006, \$179,999 (written with research advisors during graduate study).

## Professional Activities

### Invited Presentations

- University of Delaware, Newark, Delaware, September, 2007. “Bogor/Kiasan: A Contract-based Verification and Test-case Generation Framework”.
- ISoLA Special Track on Safety and Security, Paphos, Cyprus, November, 2006. “Kiasan: A Verification and Test-Case Generation Framework for Java based on Symbolic Execution”.

- ESF Exploratory Workshop on Challenges in Java Program Verification, Radboud University, Nijmegen, Netherlands, October, 2006. “Combining Symbolic Execution, Model Checking, Theorem Proving, and Constraint Solving for Reasoning about Open Systems”.
- University of Nebraska-Lincoln, Lincoln, Nebraska, September, 2004. “Model Checking JML Specifications Using Bogor”.
- CAV/ISSTA Special Event on Specification, Verification, and Testing of Concurrent Software, Boston, Massachusetts, July, 2004. “Model Checking Daisy Using The Bandera Toolset”.
- CASSIS, Marseille, France, March, 2004. “Model Checking JML Specifications using Bogor”.
- CCM Workshop, Manhattan, Kansas, USA, May, 2003. “Overview of Bogor”.
- Microsoft Research, Redmond, Washington, USA, January, 2001. “A Language Framework For Expressing Checkable Properties of Dynamic Software”.

### Conference and Workshop Presentations

- SEFM, London, United Kingdom, September, 2007. “Towards A Case-Optimal Symbolic Execution Algorithm for Analyzing Strong Properties of Object-Oriented Programs”.
- ASE, Tokyo, Japan, September, 2006. “Bogor/Kiasan: A  $k$ -bounded Symbolic Execution for Checking Strong Heap Properties of Open Systems”.
- EMSOFT, Philadelphia, Pennsylvania, USA, October, 2003. “Space Reductions for Model Checking Quasi-Cyclic Systems”.
- ESEC/FSE, Helsinki, Finland, September, 2003. “Bogor: An Extensible and Highly-Modular Model Checking Framework”.
- SoftMC Workshop, University of Colorado, Boulder, Colorado, USA, July, 2003. “Space-Reduction Strategies for Model Checking Dynamic Systems”.
- SPIN Workshop, Stanford, California, USA, August, 2000. “A Language Framework For Expressing Checkable Properties of Dynamic Software”.

### Tutorials

- Washington University, St. Louis, Missouri, November, 2006. “Domain-specific Model Checking with Bogor” (invited).
- Automated Software Engineering (ASE) Conference, Tokyo, Japan, September, 2006. “Domain-specific Model Checking Using The Bogor Framework” (invited).
- Lockheed Martin Advanced Technology Laboratories, Cherry Hill, New Jersey, August, 2006. “Domain-specific Model Checking with Bogor” (invited).
- International Summer School on Tool-based Rigorous Engineering of Software Systems (STRESS): Model-driven Development of Component-based Systems, Dortmund, Germany, May, 2006. “Domain-specific Model Checking with Bogor” (invited).
- Automated Software Engineering (ASE) Conference, Long Beach, California, November, 2005. “Bogor: An Extensible Software Model Checking Framework for Domain-Specific Model Checking” (with Matthew B. Dwyer and Matthew Hoosier).

- Programming Language Design and Implementation (PLDI) Conference, Chicago, Illinois, June, 2005. “Model Checking Concurrent Object-Oriented Systems with Bogor: An Extensible Software Model Checking Framework for Domain-Specific Model Checking” (with John Hatcliff and Matthew Hoosier).
- European Joint Conferences on Theory and Practice of Software (ETAPS), Barcelona, Spain, April, 2004. “Model Checking Software Using The Bogor Framework” (with Matthew B. Dwyer and John Hatcliff).

### Conference and Workshop Activities

- Co-organizer for the *2009 Dagstuhl Seminar 09292 on The Java Modeling Language (JML)*, with Gary T. Leavens (University of Central Florida), Peter H. Schmitt (Universität Karlsruhe), Joseph R. Kiniry (University College Dublin).
- Program committee chair for *7th Workshop on Specification and Verification of Component-Based Systems (SAVCBS 2008)*.
- Proceedings editor for *30th International Conference on Software Engineering (ICSE 2008)*.
- Program committee member for *2009 ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA, Research)*, *2008 Workshop on Experiments in Verified Software (VS-EXPERIMENTS)*, *2nd International Conference on Tests and Proofs (TAP 2008)*, *Static Analysis Summit II (SASII, 2007)*, *6th International Conference on Generative Programming and Component Engineering (GPCE 2007)*, *2007 Testing: Academic and Industrial Conference - Practice and Research Techniques (TAIC PART)*, *2007 Workshop on Verification and Analysis of Multi-threaded Java-like Programs (VAMP)*, *10th International Conference on Fundamental Approaches to Software Engineering (FASE 2007)*, *International Workshop on Specification and Verification of Component-Based Systems (SAVCBS 2005-2006)*, *21st ACM Symposium on Applied Computing (ACM SAC 2006)*, *Technical Track on Software Verification, 4th International Workshop on Distributed Event-Based Systems (DEBS 2005)*, *1st International Workshop on The Verification of COncurrent Systems with dynaMIC Allocated Heaps (COSMICAH 2005)*.
- Expert review panel member for *23rd IEEE/ACM International Conference on Automated Software Engineering (ASE 2008)*.
- Referee for *International Journal on Software Tools and Technology Transfer (STTT)*, *International Journal on Formal Methods in System Design (FMSD)*, *International Journal on Automated Software Engineering (ASE)*, *ACM Computing Surveys (CSUR) Journal*, *ACM Journal on Transactions on Software Engineering and Methodology (TOSEM)*, *International Journal on Software and Systems Modeling (SoSyM)*, *International Journal on Information and Software Technology (IST)*, and *IEEE Transactions on Software Engineering (TSE)*.

### Edited Volumes

- Thirtieth International Conference on Software Engineering (ICSE 2008), Leipzig, Germany, May 10 – 18, 2008. ACM 2008.
- Thirtieth International Conference on Software Engineering (ICSE 2008), Leipzig, Germany, May 10 – 18, 2008. Companion Volume, ACM 2008.

## Honors

- NSF Faculty Early Career Development (CAREER) Award, 2007.
- Part of the Bandera team that received a 2003 NASA Turning Goals into Reality (TGIR) Award due to close collaboration with NASA Ames researchers working on JPF2 (one of 14 awards given by NASA that year to NASA projects that have made the most outstanding contributions to NASA's goals and objectives).
- Phi Kappa Phi, 1998.
- Golden Key, 1998.

## Personal

**Citizenship:** Indonesia

**Immigration Status:** U.S. Permanent Resident

## References

Available upon request.