

Darko Marinov

Professor

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- Education**
- 2005 **Massachusetts Institute of Technology** Cambridge, MA
Ph.D. in Computer Science, Dissertation: “Automatic Testing of Software with Structurally Complex Inputs”
Advisor: Prof. Martin C. Rinard
- 2000 S.M. in Computer Science, Dissertation: “Credible Compilation”, Minor: Mathematics (Combinatorics)
- 1997 **School of Electrical Engineering, University of Belgrade** Belgrade, Yugoslavia
B.S. in Computer Science and Engineering
- Research Interests** **Software Engineering**, in particular improving software quality; functional testing for sequential, parallel, and distributed software; regression testing; performance testing
- Experience**
- 01/05 – present **University of Illinois at Urbana-Champaign** Urbana-Champaign, IL
Identity Element, Software Testing and Analysis group, advising 5 PhD+2 MS students, graduated 7 PhD+6 MS
- 01/13 – 06/13 **Groupon, Inc.** Chicago, IL
Temporary Applied Quality Engineering Researcher, Manager: Jeff Ayars
- 09/12 – 12/12 **The University of Texas at Austin** Austin, TX
Sabbatical Visitor, Hosts: Sarfraz Khurshid and Don Batory
- 09/98 – 12/04 **Massachusetts Institute of Technology** Cambridge, MA
Research and Teaching Assistant, Program Analysis and Compilation group, Advisor: Martin Rinard
- 06/03 – 08/03 **Microsoft Research** Redmond, WA
Intern, Foundations of Software Engineering group, Manager: Yuri Gurevich, Mentor: Wolfram Schulte
- 05/02 – 08/02 **IBM T. J. Watson Research Center** Hawthorne, NY
Intern, Advanced Programming Tools group, Manager: John Field, Mentor: Rob O’Callahan
- Awards&Honors**
- 2017 **Distinguished Reviewer Award** as Expert-Review Panel (ERP) member for ASE 2017
- 2017 ACM SIGSOFT **Distinguished Paper Award** for paper [C74] (ESEC/FSE 2017)
- 2017 **CHI Best Paper Award** for paper [C73] (CHI 2017)
- 2016 ACM SIGSOFT **Distinguished Paper Award** for paper [C70] (ASE 2016)
- 2015 **ASE Most Influential Paper Award** for paper [C2] (ASE 2001)
- 2015 ACM SIGSOFT **Distinguished Paper Award** for paper [C61] (ISSTA 2015)
- 2015 UIUC “List of **Teachers Ranked as Excellent** by Their Students” for Spring 2015
- 2014 Engineering Council Award for **Excellence in Advising**, University of Illinois at Urbana-Champaign
- 2012 ACM SIGSOFT **Impact Paper Award** for paper [C3] (ISSTA 2002)
- 2010 C.W. Gear **Outstanding Junior Faculty Award**, Department of Computer Science, UIUC
- 2010 ACM SIGSOFT **Distinguished Paper Award** for paper [C31] (ICSE 2010)
- 2010 **Beckman Fellow**, Center for Advanced Study, University of Illinois at Urbana-Champaign
- 2008 NSF Faculty Early Career Development (**CAREER**) Program Award
- 2006 UIUC “Incomplete List of **Teachers Ranked as Excellent** by Their Students” for Spring 2006
- 2005 ACM SIGSOFT **Distinguished Paper Award** for paper [C12] (ESEC/FSE 2005)
- 2002 ACM SIGSOFT **Distinguished Paper Award** for paper [C3] (ISSTA 2002)
- Publications** 75 conference papers, 8 demo papers, 26 workshop papers, 7 journal papers, 1 book chapter, 2 articles
(acceptance rates for conference and demo papers listed as per the university requirements)
- Conference papers
- ICSE 2018 C75. J. Bell, O. Legunsen, M. Hilton, L. Eloussi, T. Yung, and D. Marinov. DeFlaker: Automatically detecting flaky tests. In *Proc. of the 40th ACM/IEEE International Conference on Software Engineering*, pages to–appear, Gothenburg, Sweden, May 2018. (acceptance: 21%, 105/502)

- ESEC/FSE 2017 C74. M. Hilton, N. Nelson, T. Tunnell, D. Marinov, and D. Dig. Trade-offs in continuous integration: Assurance, security, and flexibility. In *Proc. of the 11th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 197–207, Paderborn, Germany, Sept. 2017. (acceptance: 25%, 72/294) This paper **won an ACM SIGSOFT Distinguished Paper Award**.
- CHI 2017 C73. F. Jahanbakhsh, W.-T. Fu, K. Karahalios, D. Marinov, and B. Bailey. You want me to work with who? Stakeholder perceptions of automated team formation in project-based courses. In *Proc. of the 35th Annual ACM Conference on Human Factors in Computing System*, pages 3201–3212, Denver, CO, May 2017. (acceptance: ~25% of 2,424 submissions) This paper **won a Best Paper Award**.
- FSE 2016 C72. O. Legunsen, F. Hariri, A. Shi, Y. Lu, L. Zhang, and D. Marinov. An extensive study of static regression test selection in modern software evolution. In *Proc. of the 24th ACM SIGSOFT International Symposium on the Foundations of Software Engineering*, pages 583–594, Seattle, WA, Nov. 2016. (acc: 28%, 74/273)
- ISSRE 2016 C71. F. Hariri, A. Shi, H. Converse, D. Marinov, and S. Khurshid. Evaluating the effects of compiler optimizations on mutation testing at the compiler IR level. In *Proc. of the 27th IEEE International Symposium on Software Reliability Engineering*, pages 105–115, Ottawa, Canada, Oct. 2016. (acceptance: 35%, 45/130)
- ASE 2016 C70. O. Legunsen, W. U. Hassan, X. Xu, G. Roşu, and D. Marinov. How good are the specs? A study of the bug-finding effectiveness of existing Java API specifications. In *Proc. of the 31st IEEE/ACM Conference on Automated Software Engineering*, pages 602–613, Singapore, Singapore, Sept. 2016. (acceptance: 20%, 57/298) This paper **won an ACM SIGSOFT Distinguished Paper Award**.
- ASE 2016 C69. M. Hilton, T. Tunnell, K. Huang, D. Marinov, and D. Dig. Usage, costs, and benefits of continuous integration in open-source projects. In *Proc. of the 31st IEEE/ACM Conference on Automated Software Engineering*, pages 426–437, Singapore, Singapore, Sept. 2016. (acceptance: 20%, 57/298)
- ASE 2016 C68. M. A. Alipour, A. Shi, R. Gopinath, D. Marinov, and A. Groce. Evaluating non-adequate test-case reduction. In *Proc. of the 31st IEEE/ACM Conference on Automated Software Engineering*, pages 16–26, Singapore, Singapore, Sept. 2016. (acceptance: 20%, 57/298)
- ICSE 2016 V2025 C67. D. Dig, R. Johnson, D. Marinov, B. Bailey, and D. Batory. COPE: Vision for a change-oriented programming environment. In *Proc. of the 38th ACM/IEEE International Conference on Software Engineering, Visions of 2025 and Beyond*, pages 773–776, Austin, TX, May 2016. (acceptance: 48%, 9/19)
- ICST 2016 C66. A. Shi, A. Gyori, O. Legunsen, and D. Marinov. Detecting assumptions on deterministic implementations of non-deterministic specifications. In *Proc. of the Ninth IEEE International Conference on Software Testing, Verification and Validation*, pages 80–90, Chicago, IL, Apr. 2016. (acceptance: 27%, 34/130)
- ASE 2015 C65. Z. Lin, D. Marinov, H. Zhong, Y. Chen, and J. Zhao. JaConTeBe: A benchmark suite of real-world Java concurrency bugs. In *Proc. of the 30th IEEE/ACM Conference on Automated Software Engineering*, pages 178–189, Lincoln, NE, Nov. 2015. (acceptance: 21%, 60/289)
- ESEC/FSE 2015 C64. A. Shi, T. Yung, A. Gyori, and D. Marinov. Comparing and combining test-suite reduction and regression test selection. In *Proc. of the 10th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 237–247, Bergamo, Italy, Sept. 2015. (acceptance: 26%, 74/291)
- SPLC 2015 C63. S. Souto, D. Gopinath, M. d’Amorim, D. Marinov, S. Khurshid, and D. Batory. Faster bug detection for software product lines with incomplete feature models. In *Proc. of the 19th International Software Product Line Conference*, pages 151–160, Nashville, TN, July 2015. (acceptance: 32%, 17/54)
- ISSTA 2015 C62. A. Gyori, A. Shi, F. Hariri, and D. Marinov. Reliable testing: Detecting state-polluting tests to prevent test dependency. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 223–233, Baltimore, MD, July 2015. (acceptance: 28%, 33/119)
- ISSTA 2015 C61. M. Gligoric, L. Eloussi, and D. Marinov. Practical regression test selection with dynamic file dependencies. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 211–222, Baltimore, MD, July 2015. (acc: 28%, 33/119) This paper **won an ACM SIGSOFT Distinguished Paper Award**.
- ICSE NIER 2015 C60. O. Legunsen, D. Marinov, and G. Roşu. Evolution-aware monitoring-oriented programming. In *Proc. of the 37th ACM/IEEE International Conference on Software Engineering, New Ideas and Emerging Results*, pages 615–618, Florence, Italy, May 2015. (acceptance: 19%, 25/135)
- ICSE 2015 C59. Y. Y. Lee, D. Marinov, and R. Johnson. Tempura: Temporal dimension for IDEs. In *Proc. of the 37th ACM/IEEE International Conference on Software Engineering*, pages 212–222, Florence, Italy, May 2015. (acceptance: 19%, 84/452)
- FSE 2014 C58. Q. Luo, F. Hariri, L. Eloussi, and D. Marinov. An empirical analysis of flaky tests. In *Proc. of the 22nd ACM SIGSOFT International Symposium on the Foundations of Software Engineering*, pages 643–653, Hong Kong, China, Nov. 2014. (acceptance: 23%, 61/273) This paper was **nominated** for ACM SIGSOFT Distinguished Paper award.

Conferences cont'd

- FSE 2014 C57. A. Shi, A. Gyori, M. Gligoric, A. Zaytsev, and D. Marinov. Balancing trade-offs in test-suite reduction. In *Proc. of the 22nd ACM SIGSOFT International Symposium on the Foundations of Software Engineering*, pages 246–256, Hong Kong, China, Nov. 2014. (acceptance: 23%, 61/273)
- ASE 2014 C56. M. Gligoric, S. Negara, O. Legunsen, and D. Marinov. An empirical evaluation and comparison of manual and automated test selection. In *Proc. of the 29th IEEE/ACM Conference on Automated Software Engineering*, pages 361–372, Vasteras, Sweden, Sept. 2014. (acceptance: 20%, 55/276)
- CAV 2014 C55. M. Gligoric, R. Majumdar, R. Sharma, L. Eloussi, and D. Marinov. Regression test selection for distributed software histories. In *Proc. of the 26th International Conference on Computer Aided Verification*, pages 293–309, Vienna, Austria, July 2014. (acceptance: 27%, 46/175)
- ASE 2013 C54. L. Zhang, M. Gligoric, D. Marinov, and S. Khurshid. Operator-based and random mutant selection: Better together. In *Proc. of the 28th IEEE/ACM Conference on Automated Software Engineering*, pages 92–102, Palo Alto, CA, Nov. 2013. (acceptance: 17%, 43/258)
- Onward! 2013 C53. A. Milicevic, D. Jackson, M. Gligoric, and D. Marinov. Model-based, event-driven programming paradigm for interactive web applications. In *Proc. of the Fourth Annual ACM International Conference on Systems, Programming, Languages and Applications: Software for Humanity (SPLASH), Onward! Research Papers*, pages 17–36, Indianapolis, IN, Oct. 2013. (acceptance: 41%, 11/27)
- ESEC/FSE 2013 C52. C. H. P. Kim, D. Marinov, S. Khurshid, D. Batory, S. Souto, P. Barros, and M. d'Amorim. SPLat: Lightweight dynamic analysis for reducing combinatorics in testing configurable systems. In *Proc. of the 9th joint meeting of the European Software Eng. Conference and the ACM SIGSOFT Symposium on the Foundations of Software Eng.*, pages 257–267, St. Petersburg, Russia, Aug. 2013. (acceptance: 21%, 51/251)
- ISSTA 2013 C51. M. Gligoric, A. Groce, C. Zhang, R. Sharma, A. Alipour, and D. Marinov. Comparing non-adequate test suites using coverage criteria. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 302–313, Lugano, Switzerland, July 2013. (acceptance: 26%, 32/124) This paper was **invited for journal submission**.
- ISSTA 2013 C50. L. Zhang, D. Marinov, and S. Khurshid. Faster mutation testing inspired by test prioritization and reduction. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 235–245, Lugano, Switzerland, July 2013. (acceptance: 26%, 32/124)
- ECOOP 2013 C49. M. Gligoric, F. Behrang, Y. Li, J. Overbey, M. Hafiz, and D. Marinov. Systematic testing of refactoring engines on real software projects. In *Proc. of the 27th European Conference on Object-Oriented Programming*, pages 629–653, Montpellier, France, July 2013. (acceptance: 25%, 29/116)
- ICSE NIER 2013 C48. Y. Y. Lee, S. Harwell, S. Khurshid, and D. Marinov. Temporal code completion and navigation. In *Proc. of the 35th ACM/IEEE International Conference on Software Engineering, New Ideas and Emerging Results*, pages 1181–1184, San Francisco, CA, May 2013. (acceptance: 22%, 31/143)
- ICSE 2013 C47. A. Nistor, L. Song, D. Marinov, and S. Lu. Toddler: Detecting performance problems via similar memory-access patterns. In *Proc. of the 35th ACM/IEEE International Conference on Software Engineering*, pages 562–571, San Francisco, CA, May 2013. (acceptance: 19%, 85/461)
- ISSTA 2012 C46. L. Zhang, D. Marinov, L. Zhang, and S. Khurshid. Regression mutation testing. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 331–341, Minneapolis, MN, July 2012. (acceptance: 29%, 31/108)
- FMOODS & FORTE 2012 C45. S. Tasharofi, R. K. Karmani, S. Lauterburg, A. Legay, D. Marinov, and G. Agha. TransDPOR: A novel dynamic partial-order reduction for testing actor programs. In *Proc. of the joint international conference Formal Methods for Open Object-Based Distributed Systems and Formal Techniques for Networked and Distributed Systems*, pages 219–234, Stockholm, Sweden, June 2012. (acceptance: 39%, 16/42)
- ICSE 2012 C44. A. Nistor, Q. Luo, M. Pradel, T. R. Gross, and D. Marinov. Ballerina: Automatic generation and clustering of efficient random unit tests for multithreaded code. In *Proc. of the 34th ACM/IEEE International Conference on Software Engineering*, pages 727–737, Zurich, Switzerland, June 2012. (acceptance: 22%, 87/408)
- TAP 2012 C43. V. Bengolea, N. Aguirre, D. Marinov, and M. F. Frias. Using coverage criteria on RepOK to reduce bounded-exhaustive test suites. In *the 6th International Conference on Tests & Proofs*, volume 7305 of LNCS, pages 19–34, Prague, Czech Republic, May 2012. (acceptance: 45%, 13/29)
- ICST 2012 C42. V. Jagannath, M. Kirn, Y. Lin, and D. Marinov. Evaluating machine-independent metrics for state-space exploration. In *Proc. of the Fifth IEEE International Conference on Software Testing, Verification and Validation*, pages 320–329, Montreal, Canada, Apr. 2012. (acceptance: 27%, 39/145)
- ICST 2012 C41. S. H. Tan, D. Marinov, L. Tan, and G. T. Leavens. @tComment: Testing Javadoc comments to detect comment-code inconsistencies. In *Proc. of the Fifth IEEE International Conference on Software Testing, Verification and Validation*, pages 260–269, Montreal, Canada, Apr. 2012. (acceptance: 27%, 39/145)
- ICST 2012 C40. J. H. Siddiqui, D. Marinov, and S. Khurshid. Lightweight data-flow analysis for execution-driven constraint solving. In *Proc. of the Fifth IEEE International Conference on Software Testing, Verification and Validation*, pages 91–100, Montreal, Canada, Apr. 2012. (acceptance: 27%, 39/145)

- ICST 2012 C39. M. Gligoric, P. C. Mehlitz, and D. Marinov. X10X: Model checking a new programming language with an "old" model checker. In *Proc. of the Fifth IEEE International Conference on Software Testing, Verification and Validation*, pages 11–20, Montreal, Canada, Apr. 2012. (acceptance: 27%, 39/145) This paper was **nominated for the best paper award**.
- ISSRE 2011 C38. L. Zhang, D. Marinov, L. Zhang, and S. Khurshid. An empirical study of JUnit test-suite reduction. In *Proc. of the 22nd IEEE International Symposium on Software Reliability Engineering*, pages 170–179, Hiroshima, Japan, Nov. 2011. (acceptance: 26%, 27/106)
- ESEC/FSE 2011 C37. V. Jagannath, M. Gligoric, D. Jin, Q. Luo, G. Roşu, and D. Marinov. Improved multithreaded unit testing. In *Proc. of the 8th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 223–233, Szeged, Hungary, Sept. 2011. (acceptance: 17%, 34/203)
- ISSTA 2011 C36. M. Gligoric, D. Marinov, and S. Kamin. CoDeSe: Fast deserialization via code generation. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 298–308, Toronto, Canada, July 2011. (acceptance: 29%, 35/121)
- ISSTA 2011 C35. V. Jagannath, Q. Luo, and D. Marinov. Change-aware preemption prioritization. In *Proc. of the ACM International Symposium on Software Testing and Analysis*, pages 133–143, Toronto, Canada, July 2011. (acceptance: 29%, 35/121)
- FASE 2011 C34. R. Sharma, M. Gligoric, A. Arcuri, G. Fraser, and D. Marinov. Testing container classes: Random or systematic? In *Proc. of the Fundamental Approaches to Software Engineering*, pages 262–277, Saarbrücken, Germany, Mar. 2011. (acceptance: 30%, 29/99)
- MICRO 2010 C33. A. Nistor, D. Marinov, and J. Torrellas. InstantCheck: Checking the determinism of parallel programs using on-the-fly incremental hashing. In *Proc. of the 43rd Annual IEEE/ACM International Symposium on Microarchitecture*, pages 251–262, Atlanta, GA, Dec. 2010. (acceptance: 19%, 45/248)
- ISSTA 2010 C32. B. Daniel, T. Gvero, and D. Marinov. On test repair using symbolic execution. In *Proc. of the International Symposium on Software Testing and Analysis*, pages 207–218, Trento, Italy, July 2010. (acceptance: 23%, 24/105)
- ICSE 2010 C31. M. Gligoric, T. Gvero, V. Jagannath, S. Khurshid, V. Kuncak, and D. Marinov. Test generation through programming in UDITA. In *Proc. of the 32nd International Conference on Software Engineering*, pages 225–234, Cape Town, South Africa, May 2010. (acceptance: 15%, 54/380) This paper **won an ACM SIGSOFT Distinguished Paper Award**.
- ICST 2010 C30. M. Gligoric, V. Jagannath, and D. Marinov. MuTMuT: Efficient exploration for mutation testing of multithreaded code. In *Proc. of the 3rd International Conference on Software Testing, Verification, and Validation*, pages 55–64, Paris, France, Apr. 2010. (acceptance: 27%, 41/154) This paper was **invited for journal submission**.
- FASE 2010 C29. S. Lauterburg, R. K. Karmani, D. Marinov, and G. Agha. Evaluating ordering heuristics for dynamic partial-order reduction techniques. In *Proc. of the Fundamental Approaches to Software Engineering*, pages 308–322, Paphos, Cyprus, Mar. 2010. (acceptance: 25%, 24/96)
- MICRO 2009 C28. A. Nistor, D. Marinov, and J. Torrellas. Light64: Lightweight hardware support for race detection during systematic testing of parallel programs. In *Proc. of the 42nd Annual IEEE/ACM International Symposium on Microarchitecture*, pages 541–552, New York City, NY, Dec. 2009. (acceptance: 25%, 52/210)
- ASE-s 2009 C27. J. Siddiqui, D. Marinov, and S. Khurshid. Optimizing a structural constraint solver for efficient software checking. In *Proc. of the 24th IEEE/ACM Conference on Automated Software Engineering*, pages 615–619, Auckland, New Zealand, Nov. 2009. (Short paper.) (acceptance: 32%, (38+33)/222)
- ASE 2009 C26. S. Lauterburg, M. Dotta, D. Marinov, and G. Agha. A framework for state-space exploration of Java-based actor programs. In *Proc. of the 24th IEEE/ACM Conference on Automated Software Engineering*, pages 468–479, Auckland, New Zealand, Nov. 2009. (acceptance: 18%, 38/222)
- ASE 2009 C25. B. Daniel, V. Jagannath, D. Dig, and D. Marinov. ReAssert: Suggesting repairs for broken unit tests. In *Proc. of the 24th IEEE/ACM Conference on Automated Software Engineering*, pages 433–444, Auckland, New Zealand, Nov. 2009. (acceptance: 18%, 38/222)
- ICST 2009 C24. M. Gligoric, T. Gvero, S. Lauterburg, D. Marinov, and S. Khurshid. Optimizing generation of object graphs in Java PathFinder. In *Proc. of the 2nd International Conference on Software Testing, Verification, and Validation*, pages 51–60, Denver, CO, Apr. 2009. (acceptance: 33%, 46/141)
- FASE 2009 C23. V. Jagannath, Y. Y. Lee, B. Daniel, and D. Marinov. Reducing the costs of bounded-exhaustive testing. In *Proc. of the Fundamental Approaches to Software Engineering*, pages 171–185, York, UK, Mar. 2009. (acceptance: 25%, 30/124)
- ISSTA 2008 C22. B. Elkarablieh, D. Marinov, and S. Khurshid. Efficient solving of structural constraints. In *Proc. of the International Symposium on Software Testing and Analysis*, pages 39–50, Seattle, WA, July 2008. (acceptance: 26%, 26/100)

Conferences cont'd

- ICSE 2008 C21. S. Lauterburg, A. Sobeih, M. Viswanathan, and D. Marinov. Incremental state-space exploration for programs with dynamically allocated data. In *Proc. of the 30th International Conference on Software Engineering*, pages 291–300, Leipzig, Germany, May 2008. (acceptance: 16%, 56/371)
- ESEC/FSE 2007 C20. B. Daniel, D. Dig, K. Garcia, and D. Marinov. Automated testing of refactoring engines. In *Proc. of the 6th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 185–194, Dubrovnik, Croatia, Sept. 2007. (acceptance: 17%, 42/251)
- ESEC/FSE 2007 C19. S. Misailovic, A. Milicevic, N. Petrovic, S. Khurshid, and D. Marinov. Parallel test generation and execution with Korat. In *Proc. of the 6th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 135–144, Dubrovnik, Croatia, Sept. 2007. (acceptance: 17%, 42/251)
- ISSTA 2007 C18. M. d'Amorim, S. Lauterburg, and D. Marinov. Delta execution for efficient state-space exploration of object-oriented programs. In *Proc. of the International Symposium on Software Testing and Analysis*, pages 50–60, London, UK, July 2007. (acceptance: 22%, 22/100) This paper was **invited for journal submission**.
- ISSRE 2006 C17. T. Xie, J. Zhao, D. Marinov, and D. Notkin. Detecting redundant unit tests for AspectJ programs. In *Proc. of the 17th IEEE International Symposium on Software Reliability Engineering*, pages 179–190, Raleigh, NC, Nov. 2006. (acceptance: 38%, 38/102)
- ICFEM 2006 C16. M. d'Amorim, A. Sobeih, and D. Marinov. Optimized execution of deterministic blocks in Java PathFinder. In *Proc. of the 8th International Conference on Formal Engineering Methods*, volume 4260 of *LNCS*, pages 549–567, Macau, China, Nov. 2006. (acceptance: 36%, 38/108)
- ASE 2006 C15. M. d'Amorim, C. Pacheco, T. Xie, D. Marinov, and M. D. Ernst. An empirical comparison of automated generation and classification techniques for object-oriented unit testing. In *Proc. of the 21st IEEE/ACM Conference on Automated Software Engineering*, pages 59–68, Tokyo, Japan, Sept. 2006. (acceptance: 19%, 22/121) This paper was **nominated for the best paper award**.
- ECOOP 2006 C14. D. Dig, C. Comertoglu, D. Marinov, and R. Johnson. Automated detection of refactorings in evolving components. In *Proc. of the 20th European Conference on Object-Oriented Programming*, volume 4067 of *LNCS*, pages 404–428, Nantes, France, July 2006. (acceptance: 14%, 21/160)
- ICFEM 2005 C13. A. Sobeih, M. Viswanathan, D. Marinov, and J. Hou. Finding bugs in network protocols using simulation code and protocol-specific heuristics. In *Proc. of the 7th International Conference on Formal Engineering Methods*, volume 3785 of *LNCS*, pages 235–250, Manchester, UK, Nov. 2005. (acceptance: 41%, 30/74)
- ESEC/FSE 2005 C12. K. Sen, D. Marinov, and G. Agha. CUTE: A concolic unit testing engine for C. In *Proc. of the 5th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering*, pages 263–272, Lisbon, Portugal, Sept. 2005. (acceptance: 16%, 32/201) This paper **won an ACM SIGSOFT Distinguished Paper Award**.
- SAT 2005 C11. D. Marinov, S. Khurshid, S. Bugrara, L. Zhang, and M. C. Rinard. Optimizations for compiling declarative models into boolean formulas. In *Proc. of the 8th Conference on Theory and Applications of Satisfiability Testing*, volume 3569 of *LNCS*, pages 187–202, St. Andrews, UK, June 2005. (acceptance: 36%, 26/73)
- TACAS 2005 C10. T. Xie, D. Marinov, W. Schulte, and D. Notkin. Symstra: A framework for generating object-oriented unit tests using symbolic execution. In *Proc. of the 11th International Conference on Tools and Algorithms for the Construction and Analysis of Systems*, pages 365–381, Edinburgh, UK, Apr. 2005. (acc: 24%, 33/140)
- ASE 2004 C9. T. Xie, D. Marinov, and D. Notkin. Rostra: A framework for detecting redundant object-oriented unit tests. In *Proc. of the 19th IEEE Conference on Automated Software Engineering*, pages 196–205, Linz, Austria, Sept. 2004. (acceptance: 14%, 25/183)
- OOPSLA 2003 C8. D. Marinov and R. O'Callahan. Object equality profiling. In *Proc. of the 18th Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications*, pages 313–325, Anaheim, CA, Oct. 2003. (acceptance: 18%, 26/147)
- RelMiCS 2003 C7. K. Arkoudas, S. Khurshid, D. Marinov, and M. Rinard. Integrating model checking and theorem proving for relational reasoning. In *Proc. of the 7th International Seminar on Relational Methods in Computer Science*, volume 3051 of *LNCS*, pages 21–33, Malente, Germany, May 2003. (acceptance: 53%, 21/40)
- SAT 2003 C6. S. Khurshid, D. Marinov, I. Shlyakhter, and D. Jackson. A case for efficient solution enumeration. In *Proc. of the 6th International Conference on Theory and Applications of Satisfiability Testing*, volume 2919 of *LNCS*, pages 272–286, Santa Margherita Ligure, Italy, May 2003. (acceptance: 50%, 33/67)
- OOPSLA 2002 C5. S. Khurshid, D. Marinov, and D. Jackson. An analyzable annotation language. In *Proc. of the 17th Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications*, pages 231–245, Seattle, WA, Nov. 2002. (acceptance: 20%, 25/125)
- FME 2002 C4. D. Marinov and S. Khurshid. VALloy: Virtual functions meet a relational language. In *International Symposium of Formal Methods Europe, Getting IT Right*, volume 2391 of *LNCS*, pages 234–251, Copenhagen, Denmark, July 2002. (acceptance: 33%, 31/95)

Conferences cont'd

- ISSTA 2002 C3. C. Boyapati, S. Khurshid, and D. Marinov. Korat: Automated testing based on Java predicates. In *Proc. of the International Symposium on Software Testing and Analysis*, pages 123–133, Rome, Italy, July 2002. (acceptance: 19%, 18/97) This paper **won an ACM SIGSOFT Distinguished Paper Award** in 2002 and **won an ACM SIGSOFT Impact Paper Award** in 2012.
- ASE 2001 C2. D. Marinov and S. Khurshid. TestEra: A novel framework for automated testing of Java programs. In *Proc. of the 16th IEEE Conference on Automated Software Engineering*, pages 22–31, San Diego, CA, Nov. 2001. (acceptance: 20%, 32/164) This paper was **nominated for the best paper award** in 2001 and **won an ASE Most Influential Paper Award** in 2015.
- MASCOTS 2000 C1. D. Marinov, D. Magdic, A. Milenkovic, J. Protic, I. Tartalja, and V. Milutinovic. Scowl: A tool for characterization of parallel workload and its use on Splash-2 application suite. In *Proc. of the 8th International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems*, pages 207–213, San Francisco, CA, Aug. 2000. (acceptance: 61%, 57/94)

Demo papers

- ASE Demo 2017 D8. O. Legunsen, A. Shi, and D. Marinov. STARTS: STATIC Regression Test Selection. In *Proc. of the 32nd IEEE/ACM International Conference On Automated Software Engineering, Tool Demos*, pages 949–954, Urbana-Champaign, IL, 2017. (acceptance: 63%, 20/32)
- FSE Demo 2016 D7. A. Gyori, B. Lambeth, A. Shi, O. Legunsen, and D. Marinov. NonDex: A tool for detecting and debugging wrong assumptions on Java API specifications. In *Proc. of the 24th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, Demo Papers*, pages 993–997, Seattle, WA, Nov. 2016. (acceptance: 41%, 13/32)
- ICSE Demo 2015 D6. M. Gligoric, L. Eloussi, and D. Marinov. Ekstazi: Lightweight test selection. In *Proc. of the International Conference on Software Engineering, Demonstrations Track*, pages 713–716, Florence, Italy, May 2015. (acceptance: 60%, 25/42)
- ASE Demo 2011 D5. S. A. Khalek, G. Yang, L. Zhang, D. Marinov, and S. Khurshid. TestEra: A tool for testing Java programs using Alloy specifications. In *Proc. of the 26th IEEE/ACM International Conference On Automated Software Engineering, Tool Demos*, pages 608–611, Lawrence, KS, Nov. 2011. (acceptance: 45%, 16/36)
- ICSE Demo 2011 D4. B. Daniel, D. Dig, T. Gvero, V. Jagannath, J. Jiaa, D. Mitchell, J. Nogiec, S. H. Tan, and D. Marinov. ReAssert: A tool for repairing broken unit tests. In *Proc. of the International Conference on Software Engineering, Demonstrations Track*, pages 1010–1012, Honolulu, HI, May 2011. (acceptance: 37%, 22/60)
- FSE Demo 2010 D3. S. Lauterburg, R. K. Karmani, D. Marinov, and G. Agha. Basset: A tool for systematic testing of actor programs. In *Proc. of the 18th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, Formal Research Demo*, pages 363–364, Santa Fe, NM, Nov. 2010. (acceptance: 22%, 6/28)
- ICSE Demo 2008 D2. T. Gvero, M. Gligoric, S. Lauterburg, M. d'Amorim, D. Marinov, and S. Khurshid. State extensions for Java PathFinder. In *Proc. of the International Conference on Software Engineering, Formal Demo Papers*, pages 863–866, Leipzig, Germany, May 2008. (acceptance: 21%, 18/88)
- ICSE Demo 2007 D1. A. Milicevic, S. Misailovic, D. Marinov, and S. Khurshid. Korat: A tool for generating structurally complex test inputs. In *Proc. of the International Conference on Software Engineering, Formal Demo Papers*, pages 771–774, Minneapolis, MN, May 2007. (acceptance: 22%, 12/56)

Workshop papers

- SQAMIA 2017 W26. A. Sullivan, K. Wang, S. Khurshid, and D. Marinov. Evaluating state modeling techniques in Alloy. In *the 6th Workshop on Software Quality, Analysis, Monitoring, Improvement, and Applications*, pages 16:1–16:09, Belgrade, Serbia, Sept. 2017
- WAX 2017 W25. A. Mahmoud, R. Venkatagiri, K. Ahmed, S. Adve, D. Marinov, and S. Misailovic. Leveraging software testing to explore input dependence for approximate computing. In *the Workshop on Approximate Computing Across the Stack*, Xi'an, China, Apr. 2017
- JPF 2016 W24. A. Gyori, B. Lambeth, S. Khurshid, and D. Marinov. Exploring underdetermined specifications using Java PathFinder. In *Proc. of the Java Pathfinder Workshop*, volume 41 of *ACM SIGSOFT Software Engineering Notes*, Seattle, WA, Nov. 2016
- JPF 2015 W23. K. Palmaskog, F. Hariri, and D. Marinov. A case study on executing instrumented code in Java PathFinder. In *Proc. of the Java Pathfinder Workshop*, volume 40 of *ACM SIGSOFT Software Engineering Notes*, Lincoln, NE, Nov. 2015
- SPIN-s 2014 W22. A. Sullivan, R. Zaeem, S. Khurshid, and D. Marinov. Towards a test automation framework for Alloy. In *Proc. of the 21st International SPIN Symposium on Model Checking of Software*, pages 113–116, San Jose, CA, July 2014. (Short paper.) (acceptance: 63%, 10/16)
- ETSE 2011 W21. B. Daniel, Q. Luo, M. Mirzaaghaei, D. Dig, D. Marinov, and M. Pezzè. Automated GUI refactoring and test script repair (position paper). In *the First International Workshop on End-to-End Test Script Engineering*, pages 38–41, Toronto, Canada, July 2011

Workshops cont'd

- Scala Days 2011 W20. S. Tasharofi, M. Gligoric, D. Marinov, and R. Johnson. Setac: A framework for phased deterministic testing of Scala actor programs. In *the Second Scala Workshop*, Stanford, CA, June 2011
- IWMSE 2010 W19. V. Jagannath, M. Gligoric, D. Jin, G. Rosu, and D. Marinov. IMUnit: Improved multithreaded unit testing. In *the Third International Workshop on Multicore Software Engineering*, pages 48–49, Cape Town, South Africa, May 2010
- CSTVA 2010 W18. R. Sharma, M. Gligoric, V. Jagannath, and D. Marinov. A comparison of constraint-based and sequence-based generation of complex input data structures. In *the 2nd Workshop on Constraints in Software Testing, Verification and Analysis*, pages 337–342, Paris, France, Apr. 2010
- Mutation 2010 W17. V. Jagannath, M. Gligoric, S. Lauterburg, D. Marinov, and G. Agha. Mutation operators for actor systems. In *the 5th International Workshop on Mutation Analysis*, pages 157–162, Paris, France, Apr. 2010
- SSEAT 2008 W16. D. Marinov and W. Schulte. Workshop on state-space exploration for automated testing (SSEAT 2008). In *Proc. of the Int'l Symposium on Software Testing and Analysis*, pages 315–316, Seattle, WA, July 2008
- WRT 2007 W15. B. Daniel, D. Dig, K. Garcia, and D. Marinov. Automated testing of Eclipse and NetBeans refactoring tools. In *the 1st Workshop on Refactoring Tools*, Berlin, Germany, July 2007 (a shorter version of [C20])
- HotDep 2007 W14. Y. Zhou, D. Marinov, W. Sanders, C. Zilles, M. d'Amorim, S. Lauterburg, R. M. Lefever, and J. Tucek. Delta execution for software reliability. In *the Workshop on Hot Topics in System Dependability*, Edinburgh, UK, June 2007
- AST 2007 W13. T. Xie, K. Taneja, S. Kale, and D. Marinov. Towards a framework for differential unit testing of object-oriented programs. In *the 2nd International Workshop on Automation of Software Test*, Minneapolis, MN, May 2007
- STEP 2007 W12. S. Misailovic, A. Milicevic, S. Khurshid, and D. Marinov. Generating test inputs for fault-tree analyzers using imperative predicates. In *the Workshop on Advances and Innovations in Systems Testing*, Memphis, TN, May 2007
- NGS 2007 W11. A. Sobeih, M. Viswanathan, D. Marinov, and J. C. Hou. J-Sim: An integrated environment for simulation and model checking of network protocols. In *the Next Generation Software Workshop*, Long Beach, CA, Mar. 2007
- Alloy 2006 W10. D. Marinov and S. Khurshid. What will the user do (next) in the tool? In *the First Alloy Workshop*, Portland, OR, Nov. 2006
- LDTA 2006 W9. X. Li, D. Shannon, J. Walker, S. Khurshid, and D. Marinov. Analyzing the uses of a software modeling tool. In *the Workshop on Language Descriptions, Tools and Applications*, Vienna, Austria, Apr. 2006
- WOOR 2005 W8. D. Dig, C. Comertoglu, D. Marinov, and R. Johnson. Automatic detection of refactorings for libraries and frameworks. In *the International Workshop on Object-Oriented Reengineering*, Glasgow, UK, July 2005
- WTAOP 2005 W7. T. Xie, J. Zhao, D. Marinov, and D. Notkin. Automated test generation for AspectJ program. In *the Workshop on Testing Aspect-Oriented Programs*, Chicago, IL, Mar. 2005
- SoftMC 2001 W6. S. Khurshid and D. Marinov. Checking Java implementation of a naming architecture using TestEra. *Electronic Notes in Theoretical Computer Science*, 55(3), July 2001
- SOW 2001 W5. S. Khurshid and D. Marinov. Using TestEra to check the Intentional Naming System of Oxygen. In *the MIT Student Oxygen Workshop*, pages 25–26, Gloucester, MA, July 2001 (an extended abstract of [W6])
- RTRV 1999 W4. M. Rinard and D. Marinov. Credible compilation with pointers. In *the Workshop on Run-Time Result Verification*, Trento, Italy, July 1999
- WCAE 1999 W3. J. Djordjevic, A. Milenkovic, I. Todorovic, and D. Marinov. CALKAS: A computer architecture learning and knowledge assessment system. In *the Workshop on Computer Architecture Education*, Orlando, FL, Jan. 1999
- PAID 1998 W2. M. Prvulovic, D. Marinov, and V. Milutinovic. Performance evaluation of split temporal/spatial caches: Paving the way to new solutions. In *the Workshop on Performance Analysis and its Impact on Design*, Barcelona, Spain, June 1998
- DSM 1998 W1. D. Marinov, D. Magdic, A. Milenkovic, J. Protic, I. Tartalja, and V. Milutinovic. An approach to characterization of parallel applications for DSM systems. In *Proc. of the 31st Hawaii International Conference on System Sciences*, pages 782–783, Kohala Coast, HI, Jan. 1998 (an extended abstract of [C1])
- Journal papers
- TOSEM 2015 J7. M. Gligoric, A. Groce, C. Zhang, R. Sharma, A. Alipour, and D. Marinov. Guidelines for coverage-based comparisons of non-adequate test suites. *Transactions on Software Engineering and Methodology*, 24(4):22:1–22:33, Aug. 2015
- STVR 2014 J6. V. S. Bengolea, N. Aguirre, D. Marinov, and M. F. Frias. RepOK-based reduction of bounded exhaustive testing. *Software Testing, Verification and Reliability*, 24(8):629–655, Dec. 2014
- STVR 2013 J5. M. Gligoric, V. Jagannath, Q. Luo, and D. Marinov. Efficient mutation testing of multithreaded code. *Software Testing, Verification and Reliability*, 23(5):375–403, Aug. 2013

Journals cont'd

- Simulation 2010 J4. A. Sobeih, M. d'Amorim, M. Viswanathan, D. Marinov, and J. C. Hou. Assertion checking in J-Sim simulation models of network protocols. *Simulation: Transactions of The Society for Modeling and Simulation International*, 86(11):651–673, Nov. 2010
- TSE 2008 J3. M. d'Amorim, S. Lauterburg, and D. Marinov. Delta execution for efficient state-space exploration of object-oriented programs. *Transactions on Software Engineering*, 34(5):597–613, Sep/Oct 2008
- JASE 2004 J2. S. Khurshid and D. Marinov. TestEra: Specification-based testing of Java programs using SAT. *Automated Software Engineering Journal*, 11(4):403–434, Oct. 2004
- EJC 2003 J1. D. Marinov and R. Radoicic. Counting 1324-avoiding permutations. *Electronic Journal of Combinatorics*, 9(2):Research Paper 13, 9 pp. (electronic), 2003

Book chapter

- B1. D. Marinov, D. Magdic, A. Milenkovic, J. Protic, I. Tartalja, and V. Milutinovic. The Scowl tool for PC-based characterization of parallel applications. In V. Milutinovic, author, *Surviving the Design of Microprocessor and Multimicroprocessor Systems: Lessons Learned*, appendix C, pages 260–283. John Wiley and Sons, 2000

Articles

- TCCA 1999 A2. M. Prvulovic, D. Marinov, Z. Dimitrijevic, and V. Milutinovic. The split spatial/non-spatial cache: A performance and complexity evaluation. *IEEE TCCA Newsletter*, pages 18–25, July 1999
- TCCA 1999 A1. M. Prvulovic, D. Marinov, Z. Dimitrijevic, and V. Milutinovic. Split temporal/spatial cache: A survey and reevaluation of performance. *IEEE TCCA Newsletter*, pages 8–17, July 1999

Service

PC/PB/ERP member for 43 conferences and 32 workshops; co-organizer for 20 events; 13 NSF panels

Conference SC

Steering Committee Member, International Conference on Software Engineering (ICSE)

2015 – present

Steering Comm. Member, International Conference on Software Testing, Verification, and Validation (ICST)

2014 – present

Steering Committee Member, International Symposium on Software Testing and Analysis (ISSTA)

Co-Organizer

2020

42nd ACM/IEEE International Conference on Software Engineering (ICSE 2020), **PC Co-Chair**

2019

34th IEEE/ACM International Conference on Automated Software Engineering (ASE 2019), **PC Co-Chair**

2018

Tool Demo Track at 33rd Conference on Automated Software Engineering (ASE Demo 2018), **PC Co-Chair**

2017

32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017), **Finance Chair**

2016

Visions and Reflections Track at 24th ACM SIGSOFT Symposium on FSE (FSE VaR 2016), **PC Co-Chair**

2015

8th International Conference on Software Testing, Verification, and Validation (ICST 2015), **PC Co-Chair**

2014

Tool Demonstration Track at 22nd ACM SIGSOFT Symposium on FSE (FSE Demo 2014), **PC Co-Chair**

2014

International Symposium on Software Testing and Analysis (ISSTA 2014), **PC Chair**

Conference PC

2019

41st ACM/IEEE International Conference on Software Engineering (ICSE 2019), Program Board (PB)

2018

40th ACM/IEEE International Conference on Software Engineering (ICSE 2018)

2017

32nd IEEE/ACM Conference on Automated Software Engineering (ASE 2017), Expert-Review Panel

2017

39th ACM/IEEE International Conference on Software Engineering (ICSE 2017), Program Board (PB)

2017

23rd Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS 2017)

2016

31st IEEE/ACM Conference on Automated Software Engineering (ASE 2016)

2016

9th International Conference on Software Testing, Verification, and Validation (ICST 2016)

2015

30th IEEE/ACM Conference on Automated Software Engineering (ASE 2015)

2015

27th International Conference on Computer Aided Verification (CAV 2015)

2014

Tenth Haifa Verification Conference (HVC 2014)

2014

29th IEEE/ACM Conference on Automated Software Engineering (ASE 2014), Expert-Review Panel

2014

36th International Conference on Software Engineering (ICSE 2014)

2014

7th International Conference on Software Testing, Verification, and Validation (ICST 2014)

2013

28th IEEE/ACM Conference on Automated Software Engineering (ASE 2013), also Doctoral Symposium

2013

4th International Conference on Runtime Verification (RV 2013)

2013

International Symposium on Software Testing and Analysis (ISSTA 2013)

2013

35th International Conference on Software Engineering, Mentoring Program (ICSE-MP 2013)

2012

20th ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE 2012)

2012

Object-oriented Programming, Systems, Languages, and Applications (OOPSLA 2012)

2012

27th IEEE/ACM Conference on Automated Software Engineering (ASE 2012), Expert-Review Panel

2012

International Symposium on Software Testing and Analysis (ISSTA 2012)

2012

ABZ Conference on Abstract State Machines (ASM), Alloy, B and Z (ABZ 2012), Alloy Track

2012

34th International Conference on Software Engineering (ICSE 2012)

2012

5th International Conference on Software Testing, Verification, and Validation (ICST 2012)

Conferences cont'd

2011 26th IEEE/ACM Conference on Automated Software Engineering (ASE 2011)
2011 9th International Symposium on Automated Technology for Verification and Analysis (ATVA 2011)
2011 33rd International Conference on Software Engineering (ICSE 2011)
2011 4th International Conference on Software Testing, Verification, and Validation (ICST 2011)
2010 25th IEEE/ACM Conference on Automated Software Engineering (ASE 2010), also Doctoral Symposium
2010 International Symposium on Software Testing and Analysis (ISSTA 2010)
2010 ABZ Conference on Abstract State Machines (ASM), Alloy, B and Z (ABZ 2010), Alloy Track
2009 24th IEEE/ACM Conference on Automated Software Engineering (ASE 2009)
2009 20th IEEE International Symposium on Software Reliability Engineering (ISSRE 2009)
2009 3rd IEEE International Symposium on Theoretical Aspects of Software Engineering (TASE 2009)
2009 International Symposium on Software Testing and Analysis (ISSTA 2009)
2009 Programming Language Design and Implementation (PLDI 2009), External Review Committee
2009 2nd International Conference on Software Testing, Verification, and Validation (ICST 2009)
2008 19th IEEE International Symposium on Software Reliability Engineering (ISSRE 2008)
2008 16th ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE 2008)
2008 23rd IEEE/ACM Conference on Automated Software Engineering (ASE 2008)
2007 22nd IEEE/ACM Conference on Automated Software Engineering (ASE 2007), Expert-Review Panel
2007 18th IEEE International Symposium on Software Reliability Engineering (ISSRE 2007)
2007 International Symposium on Software Testing and Analysis (ISSTA 2007)

Funding Evaluation

2017 2 panels at the National Science Foundation (NSF), Arlington, VA
2017 1 proposal for the National Research Fund (FNR), Luxembourg, remotely
2017 1 proposal for University Grants Committee Research Grants Council (UGC/RGC), Hong Kong, remotely
2016 1 panel at the National Science Foundation (NSF), Arlington, VA
2016 1 proposal for the Natural Sciences and Engineering Research Council of Canada (NSERC), remotely
2016 1 proposal for the National Research Fund (FNR), Luxembourg, remotely
2015 1 panel at the National Science Foundation (NSF), Arlington, VA
2015 1 proposal for the National Research Fund (FNR), Luxembourg, remotely
2015 1 proposal for the Qatar National Research Fund (QNRF), Qatar, remotely
2014 2 panels at the National Science Foundation (NSF), Arlington, VA
2014 1 proposal for the Qatar National Research Fund (QNRF), Qatar, remotely
2013 1 proposal for the University Research Board of the American University of Beirut, Lebanon, remotely
2013 1 post-doc proposal for the Swiss National Science Foundation (SNF), Switzerland, remotely
2012 1 proposal for the University Research Board of the American University of Beirut, Lebanon, remotely
2010 2 panels at the National Science Foundation (NSF), Arlington, VA
2009 1 proposal for the Air Force Office of Scientific Research (AFOSR), remotely
2008 2 panels at the National Science Foundation (NSF), Arlington, VA
2007 2 panels at the National Science Foundation (NSF), Arlington, VA
2005 1 panel at the National Science Foundation (NSF), Arlington, VA

Journal Editor

2015 – 2017 Guest Co-Editor, special issue of Software Testing, Verification and Reliability (STVR) journal

Award Evaluation

2018 ICST 2008 Most Influential Paper Committee, committee **Chair**
2015 ACM SIGSOFT Impact Paper Award Committee, committee **Chair**
2014 Award Selection Committee, Haifa Verification Conference (HVC 2014), committee member
2013 Award Selection Committee, Haifa Verification Conference (HVC 2013), committee member

Workshop Organizer

2017 Java PathFinder Workshop (JPF 2017)
2017 Workshop on Testing Embedded and Cyber-Physical Systems (TECPS 2017)
2016 Testing: Academia-Industry Collaboration, Practice and Research Techniques (TAIC PART 2016)
2016 38th International Conference on Software Engineering (ICSE 2016), Workshops Committee member
2012 27th Conference on Automated Software Engineering (ASE 2012), Workshops and Tutorials **Co-Chair**
2011 Working Session on Parallel Programming Tools at the UPCRC Symposium, Intel, Santa Clara, CA
2011 Workshop on State-space Exploration for Automated Testing (SSEAT 2011)
2011 Workshop on the State of the Art in Automated Software Engineering Research (SOTA 2011)
2010 Workshop on State-space Exploration for Automated Testing (SSEAT 2010)
2009 Workshop on State-space Exploration for Automated Testing (SSEAT 2009)
2009 Software Testing Education Workshop (STEW 2009)
2008 Workshop on State-space Exploration for Automated Testing (SSEAT 2008)

Workshop PC

2018	Workshop on Verification and Validation of Internet of Things (VVIoT 2018)
2018	Testing: Academia-Industry Collaboration, Practice and Research Techniques (TAIC PART 2018)
2017	Doctoral Symposium at International Symposium on Software Testing and Analysis (ISSTA DS 2017)
2017	International Conference on Software Engineering, New Ideas and Emerging Results (ICSE NIER 2017)
2017	Testing: Academia-Industry Collaboration, Practice and Research Techniques (TAIC PART 2017)
2016	Doctoral Symposium at 24th ACM SIGSOFT Symposium on FSE (FSE DS 2016)
2015	Doctoral Symposium at ESEC/FSE (ESEC/FSE DS 2015)
2015	International Symposium on Software Testing and Analysis, Demo track (ISSTA Demo 2015)
2013	5th Workshop on Constraints in Software Testing, Verification and Analysis (CSTVA 2013)
2012	Java PathFinder Workshop (JPF 2012)
2012	4th Workshop on Constraints in Software Testing, Verification and Analysis (CSTVA 2012)
2011	Ninth International Workshop on Dynamic Analysis (WODA 2011)
2011	End-to-end Test Script Engineering Workshop (ETSE 2011)
2011	18th International SPIN Workshop on Model Checking Software (SPIN 2011)
2011	3rd Workshop on Constraints in Software Testing, Verification and Analysis (CSTVA 2011)
2010	4th International Workshop on Advances and Innovations in Systems Testing (STEP 2010)
2010	2nd Workshop on Constraints in Software Testing, Verification and Analysis (CSTVA 2010)
2010	6th Workshop on Model Based Testing (MBT 2010)
2009	Workshop on Specification and Verification of Component Based Systems (SAVCBS 2009)
2009	3rd International Workshop on Advances and Innovations in Systems Testing (STEP 2009)
2009	5th Workshop on Model Based Testing (MBT 2009)
2008	Workshop on Specification and Verification of Component Based Systems (SAVCBS 2008)
2008	2nd International Workshop on Advances and Innovations in Systems Testing (STEP 2008)
2008	International Conference on Software Testing, Verification and Validation (ICST 2008), Student Papers Track
2008	4th Workshop on Model Based Testing (MBT 2008)
2007	5th International Workshop on Dynamic Analysis (WODA 2007)
2007	3rd Workshop on Model Based Testing (MBT 2007)
2006	3rd International Workshop on Software Quality Assurance (SOQUA 2006)
2006	International Conference on Software Engineering, Research Demonstrations (ICSE Demo 2006)
2006	4th International Workshop on Dynamic Analysis (WODA 2006)
2006	2nd Workshop on Model Based Testing (MBT 2006)
2004	4th MIT Student Oxygen Workshop (MIT SOW 2004)

University (Selected)

2016 – present	Fellowships, Assistantships & Admissions (FAA) Committee, Dept. of Computer Science, UIUC, Chair
2014 – 2015	Graduate College Fellowship Board Executive Committee, UIUC, Member
2014 – 2015	Graduate College Area 1 (Engineering & Physical Sciences) Fellowship Committee, UIUC, Chair
2013 – 2016	Graduate College Area 1 (Engineering & Physical Sciences) Fellowship Committee, UIUC, Member
2011 – 2017	Coaching for the ACM International Collegiate Programming Contest (ICPC), UIUC, Faculty Liaison

Presentations

Invited/visit/job	44 conference and workshop talks, 31 invited talks, 25 visit talks, 9 job talks, 5 panels
05/17	“Applying Math and CS for Systematic Software Testing”, University of Missouri–St. Louis, St. Louis, MO
05/17	“Applying Software Testing for Hardware Resiliency Analysis”, UT ECE Dept. Colloquia, Austin, TX
09/16	“Flaky Tests Be Gone”, UW PLSE Research Retreat, Leavenworth, WA
12/15	“Some Software Engineering Research at UIUC”, University of California, Irvine, Irvine, CA
05/15	“Tempura: Temporal Dimension for IDEs”, “Politehnica” University of Bucharest, Bucharest, Romania
05/15	—, “Politehnica” University, Timisoara, Romania
11/14	“Important Challenges in (Regression) Testing”, EPFL, Lausanne, Switzerland
03/14	“Why Is Mutation Testing Controversial and What Can We Do About It?”, Mutation 2014, Cleveland, OH
01/13	“ReAssert: Suggesting Repairs for Broken Unit Tests”, Geekfest, Groupon, Chicago, IL
11/12	“Systematic Software Testing: The Korat Approach”, ACM SIGSOFT Impact Paper Award, 2012, Cary, NC
11/12	“Detecting Performance Problems via Similar Memory-Access Patterns”, The University of Texas at Austin
11/12	—, University of Lugano, Lugano, Switzerland
11/12	—, Google, Zurich, Switzerland
11/12	—, EPFL, Lausanne, Switzerland
02/12	“IMUnit: Improved Multithreaded Unit Testing”, Imperial College London, London, UK
01/12	—, CREST Open Workshop (COW 17), London, UK
12/11	“Brief Overview of Research on Testing Parallel Code in the I2PC Center”, Intel, Santa Clara, CA
12/11	—, Intel, Jones Farms, OR

Talks cont'd

06/11 “IMUnit: Improved Multithreaded Unit Testing”, University of Lugano, Lugano, Switzerland
 06/11 —, EPFL Summer Research Institute, Lausanne, Switzerland
 03/11 —, Karlsruhe Institute of Technology, Karlsruhe, Germany
 03/11 “Systematic Software Testing Using Test Abstractions”, Saarland University, Saarbrucken, Germany
 03/11 —, SVARM 2011, Saarbrucken, Germany
 03/11 “ReAssert: Suggesting Repairs for Broken Unit Tests”, University of Belgrade, Belgrade, Serbia
 02/11 —, University of Buenos Aires, Buenos Aires, Argentina
 09/10 “Systematic Software Testing Using Test Abstractions”, Purdue University, West Lafayette, IN
 08/10 “Java PathFinder in Research and Teaching at Illinois”, NASA Ames, Moffett Field, CA
 08/10 “ReAssert: Suggesting Repairs for Broken Unit Tests”, Google, Mountain View, CA
 08/10 —, IBM Research - Almaden, San Jose, CA
 08/10 “Systematic Software Testing Using Test Abstractions”, Microsoft Research, Mountain View, CA
 07/10 —, University of Wisconsin-Madison, Madison, WI
 07/10 —, University of Milano-Bicocca, Milan, Italy
 07/10 —, “Politehnica” University, Timisoara, Romania
 02/10 “Model-Based Testing Using Test Abstractions”, Accenture Labs, Chicago, IL
 07/09 “UDITA: Unified Declarative and Imperative Test Abstractions”, SAP Research, Darmstadt, Germany
 03/09 “Model-Based Testing Using Test Abstractions”, EPFL, Lausanne, Switzerland
 03/09 —, Model Based Testing workshop (MBT 2009), York, UK
 11/08 “Automated Testing of Refactoring Engines Using Test Abstractions”, Microsoft Research, Redmond, WA
 07/08 —, North Carolina State University, Raleigh, NC
 01/08 “Systematic Software Testing with Test Abstractions”, Agitar, Mountain View, CA
 01/08 —, Google, Mountain View, CA
 11/07 “Parallel Test Generation and Execution with Korat”, University of Michigan, Ann Arbor, MI
 03/06 “Generating Object-Oriented Unit Tests by Symbolic Execution”, University of Arizona, Tucson, AZ
 11/05 —, University of Warwick, Warwick, UK
 06/05 —, University of Bucharest, Bucharest, Romania
 06/05 “Compiling Declarative Models into Boolean Formulas”, University of Belgrade, Belgrade, Serbia-Montenegro
 06/05 —, University of Novi Sad, Novi Sad, Serbia-Montenegro
 03/05 “Detecting Redundant Object-Oriented Unit Tests”, Parasoft, San Diego, CA
 05/04 “Automatic Testing of Software with Structurally Complex Inputs”, IBM Research, Hawthorne, NY
 04/04 —, University of Illinois at Urbana-Champaign, Urbana-Champaign, IL
 04/04 —, University of Washington, Seattle, WA
 04/04 —, Cornell University, Ithaca, NY
 04/04 —, Rice University, Houston, TX
 04/04 —, University of Chicago, Chicago, IL
 03/04 —, University of Texas at Austin, Austin, TX
 02/04 —, Microsoft Research, Redmond, WA
 02/04 —, Northwestern University, Evanston, IL
 11/03 “Testing Based on a Solver for Executable Predicates”, University of Southern California, Los Angeles, CA
 11/03 —, University of California Los Angeles, Los Angeles, CA
 04/03 “The MulSaw Approach to Automated Specification-Based Testing”, Stanford University, Stanford, CA
 04/03 “Object Equality Profiling”, University of California Berkeley, Berkeley, CA
 11/02 “The MulSaw Approach to Automated Specification-Based Testing”, Microsoft Research, Redmond, WA
 10/02 —, Nokia Research Center, Burlington, MA
 05/01 “Credible Compilation”, Guest Lecturer, Object-Oriented Dynamic Languages course, MIT, Cambridge, MA
 01/01 —, Dynamic Languages Seminar, MIT, Cambridge, MA

Conference/workshop

11/17 “Support for Security and Safety of Programmable IoT Systems”, NSF CPS PI meeting, Alexandria, VA
 09/17 [W26] at SQAMIA 2017, Belgrade, Serbia
 07/17 “Support for Security and Safety of Programmable IoT Systems”, DHS Workshop, Washington, DC
 09/16 [C69] at ASE 2016 (joint talk with Danny Dig), Singapore, Singapore
 06/16 “A Proactive Approach to Detecting Flaky Tests” at ASE 2016 Pre-PC-Meeting Workshop, Passau, Germany
 07/15 [C63] at SPLC 2015, Nashville, TN
 07/15 “Important Challenges in (Regression) Testing” at ASE 2015 Emerging Ideas Workshop, Baltimore, MD
 05/15 [C60] at ICSE 2015 NIER track, Florence, Italy
 05/15 [C59] at ICSE 2015, Florence, Italy
 12/14 “Evolution-Aware Monitoring-Oriented Programming”, NII Shonan Seminar No.048, Shonan, Japan
 09/14 [C56] at ASE 2014, Vasteras, Sweden

Talks cont'd

07/13 [C51] at ISSTA 2013, Lugano, Switzerland
 07/13 [C49] at ECOOP 2013, Montpellier, France
 07/12 “Parallel Testing Tools from Illinois”, UPCRRC Workshop, Microsoft Research, Redmond, WA
 07/12 [C37] at I2PC Summer School, Urbana, IL
 06/12 [C41] at OOPSLA 2012 Pre-PC-Meeting, Orlando, FL
 04/12 [C39] at ICST 2012, Montreal, Canada
 07/11 [C37] at ASE 2011 Pre-PC-Meeting Workshop, Moffett Field, CA
 05/11 [D4] at ICSE Demonstrations Track 2011, Waikiki, HI
 08/10 “Verifying X10 Applications”, JPF Summer Project Summit 2010, Mountain View, CA
 07/10 [C32] at ISSTA 2010, Trento, Italy
 05/10 [C31] at ASE 2010 Pre-PC-Meeting Workshop, Milan, Italy
 05/10 [W19] at IWMSE 2010, Cape Town, South Africa
 04/10 [C30] at ISSTA 2010 Pre-PC-Meeting Workshop, Milan, Italy
 08/09 “Incremental Testing of Parallel Code”, UPCRRC Correctness Workshop, Intel, Hillsboro, OR
 07/09 [C31] at ASE 2009 Pre-PC-Meeting Workshop, Marburg, Germany
 04/09 [C24] at ICST 2009, Denver, CO
 03/09 [C23] at ISSTA 2009 Pre-PC-Meeting Workshop, Raleigh, NC
 06/08 [C21] at ASE 2008 Post-PC-Meeting Workshop, Mountain View, CA
 05/08 [D2] at JPF Workshop 2008, Sunnyvale, CA
 05/07 [W12] at STEP 2007, Memphis, TN
 04/06 [W9] at LDTA 2006, Vienna, Austria
 06/05 [C11] at SAT 2005, St. Andrews, UK
 12/03 “Automated Test Generation”, Seminar 03491 “Understanding Program Dynamics”, Dagstuhl, Germany
 10/03 [C8] at OOPSLA 2003, Anaheim, CA
 10/03 [C8] at the New England Programming Languages Seminar (NEPLS), Brandeis University, Waltham, MA
 05/03 [C7] at RelMiCS 7, Malente, Germany
 05/03 [C6] at SAT 2003, Santa Margherita Ligure, Italy
 07/02 [C4] at FME 2002, Copenhagen, Denmark
 05/02 [C5] at the IBM Programming Languages Day, IBM Research, Hawthorne, NY
 11/01 [C2] at ASE 2001, San Diego, CA
 04/00 [W4] at the Masterworks 2000, MIT, Cambridge, MA
 01/99 [W3] at WCAE 1999, Orlando, FL
 01/98 [W1] at the Workshop on Distributed Shared Memory, HICSS 1998, Kohala Coast, HI

Panels

11/15 30 ASE and Industry: Match made in Heaven, ASE 2015, Lincoln, NE
 09/12 Benchmarks in Automated Software Engineering, ASE 2012, Essen, Germany
 09/12 Doctoral Symposium, ASE 2012, Essen, Germany
 03/10 “Code-Based Test Data Generation”, Seminar 10111, Dagstuhl, Germany
 04/06 “Formal Methods: It’s not too Much to Ask”, Affiliates Conference, UIUC, Urbana-Champaign, IL

Released Code

<http://mir.cs.illinois.edu/marinov/software.html>
 ASTGen <http://mir.cs.illinois.edu/astgen>, Test generation (using imperative test abstractions)
 Basset <http://mir.cs.illinois.edu/basset>, Systematic testing of actor programs
 CoCo <http://mir.cs.illinois.edu/coco>, Comparing non-adequate test suites using coverage criteria
 CoDeSe <http://mir.cs.illinois.edu/codese>, Dataset for fast deserialization via code generation
 Coverage <http://mir.cs.illinois.edu/coverage>, Containter code instrumented for predicate coverage
 Ekstazi <http://ekstazi.org>, Dynamic regression test selection
 IMUnit <http://mir.cs.illinois.edu/imunit>, Improved multithreaded unit testing
 JPF contributions <http://mir.cs.illinois.edu/jpf>, Contributions to the Java PathFinder model checker
 Korat <http://mir.cs.illinois.edu/korat>, Test generation (using declarative test abstractions)
 NonDex <http://github.com/TestingResearchIllinois/NonDex>, Test exploration for non-deterministic specs
 ReAssert <http://mir.cs.illinois.edu/reassert>, Test repair
 ReEx <http://mir.cs.illinois.edu/reex>, Re-execution based exploration of multithreaded (Java) programs
 RTR <http://mir.cs.illinois.edu/rtr>, Systematic testing of refactoring engines on real software projects
 Setac <http://mir.cs.illinois.edu/setac>, Test framework for (Scala) actor programs
 STARTS <http://github.com/TestingResearchIllinois/starts>, Static regression test selection
 Toddler <http://mir.cs.illinois.edu/toddler>, Performance testing based on similar memory patterns
 UDITA <http://mir.cs.illinois.edu/udita>, Test generation (using declarative&imperative test abstractions)
 YASGL <http://github.com/TestingResearchIllinois/yasgl>, Yet another simple graph library

Graduated

Students

PhD 2017	University of Illinois at Urbana-Champaign Urbana-Champaign, IL Alex Gyori, <i>Proactively Detecting Unreliable Tests</i> first job: Facebook, Seattle, WA
PhD 2015	Milos Gligoric, <i>Regression Test Selection: Theory and Practice</i> first job: University of Texas at Austin, Austin, TX
PhD 2015	Qingzhou Luo, <i>Testing, Runtime Verification, and Analysis of Concurrent Programs</i> , co-advised by Grigore Rosu first job: Google, Mountain View, CA
PhD 2014	Adrian Nistor, <i>Understanding, Detecting, and Repairing Performance Bugs</i> , co-advised by Shan Lu first job: Chapman University, Orange, CA
PhD 2012	Vilas Jagannath, <i>Improved Regression Testing of Multithreaded Programs</i> , co-advised by Gul Agha first job: Optiver LLC, Chicago, IL
PhD 2011	Steven Lauterburg, <i>Systematic Testing for Actor Programs</i> first job: Salisbury University, Salisbury, MD
PhD 2007	Marcelo d'Amorim, <i>Efficient Explicit-state Model Checking for Programs with Dynamically Allocated Data</i> first job: Federal University of Pernambuco (UFPE), Recife, Brazil
MS 2015	Lamyaa Eloussi, <i>Determining Flaky Tests from Test Failures</i> first job: Salesforce, San Mateo, CA
MS 2013	Rohan Sharma, <i>Guidelines for Coverage-based Comparisons of Non-adequate Test Suites</i> , co-advised by Matt Caesar first job: Dropbox, San Francisco, CA
MS 2012	Shin Hwei Tan, <i>@tComment: Testing Javadoc Comments to Detect Comment-Code Inconsistencies</i> , co-advised by Lin Tan first job: PhD student, National University of Singapore
MS 2011	Mathew Kirn, <i>Evaluating Machine-Independent Metrics for State-Space Exploration</i> first job: Microsoft, Redmond, WA
MS 2010	Vilas Jagannath, <i>Reducing the Costs of Bounded-Exhaustive Testing</i> , co-advised by Gul Agha first job: continued PhD studies
MS 2007	Kely Garcia, <i>Testing the Refactoring Engine of the NetBeans IDE</i> first job: Strata Decision Technology, Champaign, IL

PhD Thesis

Committee Member Served on many more UIUC PhD committees for preliminary exams (and final defenses when the year is listed) for the following students: Tankut Baris Aktemur (2009), Federico Balaguer (2006), Feng Chen (2009), Nicholas Y. Chen (2013), Anthony Edward Cozzie (2010), Daniel Dig (2007), Yue Lu Duan (2014), Jianxiong Gao, Pranav Garg (2015), Munawar Hafiz (2010), Dongyun Jin (2012), Rajesh K. Karmani (2013), Choongwan Lee (2013), Yun Young Lee (2014), Sihani Li, Yu Lin (2015), Chao Liu (2007), Shan Lu (2008), Patrick O'Neil Meredith (2012), Abdullah Muzahid (2012), Stanislav Negara (2013), Semih Okur (2016), Jeffrey L. Overbey (2011), Shanxiang Qi (2013), Swarup Kumar Sahoo (2012), Traian Florin Serbanuta (2010), Sankalp Singh (2012), Ahmed Adel Sobeih (2008), Francesco Sorrentino (2014), Lin Tan (2009), Samira Tasharofi (2013), Joseph A. Tucek (2011), Weiwei Xiong (2013), Wei Yang, Ayesha Yasmeen (2011), and Pin Zhou (2006)

External Member

Also served on the committees for Kaiyuan Wang at the University of Texas at Austin, Mohammad Amin Alipour at Oregon State University (2017), Jonathan Bell at Columbia University (2016), Linhai Song at the University of Wisconsin-Madison (2015), Tihomir Gvero at EPFL, Switzerland (2014), Sai Zhang at the University of Washington (2014), Lingming Zhang at the University of Texas at Austin (2014), Chang Hwan Peter Kim at the University of Texas at Austin (2013), Mehdi Mirzaaghaei at the University of Lugano, Switzerland (2012), Junaid Haroon Siddiqui at the University of Texas at Austin (2011), and Juan Pablo Galeotti at the University of Buenos Aires, Argentina (2011)

Contests

02/96	6 international, 9 national (8 in former Yugoslavia), total of over 30 above regional level
11/95	World Finals , ACM International Collegiate Programming Contest (ICPC), Philadelphia, PA
05/95	3rd place, Eastern European Regional ACM ICPC, Bucharest, Romania
10/94	1st place , Computer Science area, National Contest of Electrical Engineering Schools, Budva, Yugoslavia
07/91	Eastern European Regional ACM ICPC, Bucharest, Romania
05/91	International Mathematical Olympiad, Sigtuna, Sweden
05/91	2nd prize , International Olympiad in Informatics, Athens, Greece
05/91	2nd prize, Balkan Mathematical Olympiad, Constanța, Romania

Teaching Experience

Fall 2017, 2016, 2014, 2011, 2010, 2008 & 2007

University of Illinois at Urbana-Champaign Urbana-Champaign, IL

Teacher for “Advanced Topics in Software Engineering”, graduate course on selected topics, which was similar as in Fall/Spring 2005 but with no requirement for research projects. Still, **one student published one paper** from Fall 2014, **two students published two papers** from Fall 2011, **four students published two papers** from Fall 2010, **three students published two papers** from Fall 2008, and **two students published three papers** from Fall 2007. This course is also offered online in the department’s Illinois Internet Computer Science (I2CS) program.

Spring 2016, 2015, 2012, 2009, 2008 & 2006

Teacher for “Software Testing”, a course for senior undergraduate and junior graduate students. The students’ scores of my teaching for Spring 2006 and 2015 placed me on the UIUC “(Incomplete) List of **Teachers Ranked as Excellent** by Their Students”.

Spring 2014, 2010, & 2007

Teacher for “Software Engineering II”, second course in an introductory sequence on software engineering. This course is also offered online in the department’s Illinois Internet Computer Science (I2CS) program.

Fall 2015, 2013, 2009 & 2006

Teacher for “Software Engineering I”, first course in an introductory sequence on software engineering. This course is also offered online in the department’s Illinois Internet Computer Science (I2CS) program.

February 2011

Teacher for “Automated Test Generation and Repair”, an intensive, week-long course at the Rio 2011 Summer School in Computer Science in Rio Cuarto, Argentina.

Fall 2005 & Spring 2005

Teacher for “Software Testing and Analysis”, a project-based, graduate course on dynamic and static program analysis for finding software errors. Based on the course projects from Fall, **two students published two papers**, and from Spring, **five students published four papers**.

Massachusetts Institute of Technology Cambridge, MA

08/01 – 12/04

Supervisor, with Sarfraz Khurshid, of one M.Eng. student, two AUP (Advanced Undergraduate Project) students, and six UROP (Undergraduate Research Opportunities) students in the MulSaw project.

01/01 – 05/01

Supervisor of one AUP and two UROP students in the MIT’s Direct-To (D2) project.

09/99 – 12/99

Teaching Assistant for “Computer Language Engineering”, an undergraduate compiler course that includes a team project on compiler implementation.

School of Electrical Engineering, University of Belgrade Belgrade, Yugoslavia

10/97 – 12/97 & 10/96 – 12/96

Lab Assistant for undergraduate courses in computer architecture and digital design. Participated in the development of simulation programs for lab assignments [W3] and helped students use these programs.

05/96

Coach of the University of Belgrade Computer Science team for the National Contest of Electrical Engineering Schools. Selected and prepared our team, developed problems for other teams, and marked answers.

10/93 – 07/95

Student Assistant for “Programming Languages and Methods” course. Helped students in overcoming weak points, reviewed problem sets, and graded exams; four semesters.

Math Academy High School Belgrade, Yugoslavia

04/96 – 06/96

Teacher for the “Operating Systems” course at the Math Academy, a high school specializing in math and computer science, unique in Yugoslavia. Developed lecture notes, gave lectures, and graded pupils.

04/96

Jury Member at the Province of Vojvodina math contest for primary school pupils. Graded solutions.

Funding

13 NSF grants, 4 industry gifts, 1 industry award, 2 faculty awards; **my share over \$4.1M (of \$8.4M total)**

09/17 – 08/19

“EAGER:USBRCR: Collaborative Research: Lightweight Policy Enforcement of Information Flows in IoT Infrastructures”, PI: Darko Marinov, also non-UIUC: Atul Prakash, José Augusto Suruagy Monteiro, Paulo André da Silva Gonçalves, Marcelo d’Amorim, Kiev Gama, *National Science Foundation*, CNS-1740916, \$136k

01/17 – 12/19

“CPS: Synergy: Collaborative Research: Support for Security and Safety of Programmable IoT Systems”, PI: Darko Marinov, also non-UIUC: Atul Prakash, *National Science Foundation*, CNS-1646305, \$352k

08/16

“Improving Regression Testing Efficiency”, gift from Qualcomm, \$50k

03/15

“Combating Flaky Tests”, gift from Google Faculty Research Awards, \$51k

12/14 – 11/17

“SHF:Small: Revisiting Assumptions of Regression Testing”, PI: Darko Marinov; *National Science Foundation*, CCF-1421503, \$462k (\$12k REU)

09/14 – 08/17

“XPS: FULL: FP: Collaborative Research: Model-based, Event Driven Scalable Programming for the Mobile Cloud”, PI: Gul Agha, co-PI: Darko Marinov; also non-UIUC: Daniel Jackson, *National Science Foundation*, CCF-1438982, \$682k (\$16k REU)

08/14 – 07/17 “SHF: Medium: Collaborative Research: Improved Performance Testing and Debugging”, PI: Darko Marinov, co-PI: Tao Xie; also non-UIUC: Harry Xu, *National Science Foundation*, CCF-1409423, \$616k (\$16k REU)

09/12 – 08/15 “SHF: Small: Interactive Refactoring for Multicore Parallelism”, PI: Danny Dig, co-PI: Darko Marinov; *National Science Foundation*, CCF-1219027, \$250k

07/12 – 06/16 “SHF: Large: Collaborative Research: Science and Tools for Software Evolution”, UIUC PI: Danny Dig, co-PIs: Brian Bailey, Ralph Johnson, Darko Marinov; also non-UIUC: Don Batory, *National Science Foundation* CCF-1213091, \$1.8M

10/10 Unrestricted gift for the C.W. Gear Outstanding Junior Faculty Award, Department of Computer Science, UIUC, \$4k

09/10 – 08/14 “Collaborative Research: SHF: Large: Designing the Programmable Many-Core for Extreme Scale Computing”, UIUC PI: Josep Torrellas, co-PIs: Sam King, Darko Marinov; also non-UIUC: Sam Midkiff, *National Science Foundation* CCF-1012759, \$1.8M

08/10 – 08/11 Unrestricted gift for the Beckman Fellowship, Center for Advanced Study, UIUC, \$8k

06/10 – 05/13 “Collaborative Research: II-EN: Infrastructure Support for Software Testing Research”, UIUC PI: Darko Marinov; also non-UIUC: Gregg Rothermel, Tao Xie, Sarfraz Khurshid, *National Science Foundation* CNS-0958199, \$277k

03/10 – 08/11 “Static and Dynamic Analysis Tool for Testing Concurrent Embedded Systems”, research award from Samsung Advanced Institute of Technology, PI: Grigore Rosu, co-PI: Darko Marinov, \$100k

02/10 “Systematic Testing in and for X10”, gift from IBM X10 Innovation Grants, \$20k

09/09 – 08/12 “SHF: Small: IMUnit: Improved Multithreaded Unit Testing”, PI: Darko Marinov, co-PI: Grigore Rosu, *National Science Foundation* CCF-0916893, \$500k

06/08 – 05/13 “CAREER: Systematic Software Testing Using Test Abstractions”, PI: Darko Marinov, *National Science Foundation* CCF-0746856, \$406k (\$6k REU)

09/06 – 08/08 “Collaborative Research: SoD-TEAM: A Feedback-Based Architecture for Highly Reliable Embedded Software”, UIUC PI: Tarek Abdelzaher, co-PIs: Lui Sha, Marco Caccamo, Darko Marinov; also non-UIUC: Aloysius Mok, James Browne, Fei Xie, Ella Atkins, *National Science Foundation* CNS-0613665, \$200k

08/06 – 07/09 “CSR-PDOS: Improving System Reliability via Delta Execution”, PI: Yuanyuan Zhou, co-PIs: William Sanders, Craig Zilles, Darko Marinov, *National Science Foundation* CNS-0615372, \$762k (\$12k REU)

11/05 “Theory and Practice of Object-Oriented Unit Tests”, gift from Microsoft, \$5k