Christian Bird

CONTACT Information

One Microsoft Way Building 99/2113 Redmond, WA 98052

E-mail: cbird@microsoft.com http://www.cabird.com

RESEARCH INTERESTS

Empirical software engineering, Open Source Software communities, social networks, communication and collaboration in software engineering, software tools

EDUCATION

University of California, Davis, Davis, California, USA

Ph.D., Computer Science, June 2010

- Dissertation Topic: "Sociotechnical Collaboration and Coordination in Open Source Software"
- Advisor: Prof. Premkumar Devanbu

University of California, Davis, Davis, California, USA

M.S., Computer Science, 2008

• Advisor: Prof. Premkumar Devanbu

Brigham Young University, Provo, Utah, USA

Bachelor of Science in Computer Science, 2003

Honors and Awards

ACM SIGSOFT Distinguished Paper

 ACM SigSoft Symposium on Foundations of Software Engineering, "Learning Natural Coding Conventions", 2014

ACM SIGSOFT Distinguished Paper and ISSTA Best Paper

 ACM SigSoft International Symposium on Software Testing and Analysis, "Collecting a Heap of Shapes", 2013

Distinguished Referee

• ACM Transactions on Software Engineering and Methodology, 2011-2012

ACM SIGSOFT Distinguished Paper

• ACM SigSoft Symposium on Foundations of Software Engineering, "Assessing the Value of Branches with What-If Analysis", 2012

ACM SIGSOFT Distinguished Paper

• International Conference on Software Engineering, "Does Distributed Development Affect Software Quality? An Empirical Case Study of Windows Vista", 2009

Mining Software Repositories Best Paper Award

• International Working Conference on Mining Software Repositories, "Clones: What is that smell?", 2010

Best Student Talk

 \bullet Mining Software Archives, "The Effect of Change Semantics on Coordination Requirements", 2010

Best Graduate Researcher Award

• U.C. Davis, Dept. of Computer Science, 2008 – 2009

Brigham Young University Dean's List

 \bullet Awarded in 1996, 2001, 2002

Golden Key Honor Society

• Member, 2000 – present

US National Merit Scholar and Scholarship

• Awarded in 1996 for complete undergraduate career.

REFEREED PUBLICATIONS

- 58. **Christian Bird**, Trevor Carnahan, and Michaela Greiler. Lessons Learned from Building and Deploying a Code Review Analytics Platform. In *Proceedings of the International Conference on Mining Software Repositories*, 2015, IEEE
- 57. Amiangshu Bosu, Michaela Greiler, and **Christian Bird**. Characteristics of Useful Code Reviews: An Empirical Study at Microsoft. In *Proceedings of the International Conference on Mining Software Repositories*, 2015, IEEE
- 56. Baishakhi Ray, Meiyappan Nagappan, **Christian Bird**, Nachiappan Nagappan, and Thomas Zimmermann. The Uniqueness of Changes: Characteristics and Applications. In *Proceedings of the International Conference on Mining Software Repositories*, 2015, IEEE
- 55. Motahareh Bahrami Zanjani, Huzefa Kagdi, and **Christian Bird**. Using Developer-Interaction Trails to Triage Change Requests. In *Proceedinsg of the International Conference on Mining Software Repositories*, 2015, IEEE
- 54. Edward K. Smith, **Christian Bird**, and Thomas Zimmermann. Build it yourself! Homegrown Tools in a Large Software Company. In *Proceedings of the 37th International Conference on Software Engineering*, 2015, IEEE. (19%)
- 53. Michael Barnett, **Christian Bird**, Joao Brunet, and Shuvendu K. Lahiri. Helping Developers Help Themselves: Automatic Decomposition of Code Review Changesets. In *Proceedings of the 37th International Conference on Software Engineering*, 2015, IEEE. (19%)
- 52. Emerson Murphy-Hill, Thomas Zimmermann, **Christian Bird**, and Nachiappan Nagappan. The Design Space of Bug Fixes and How Developers Navigate It. *IEEE Transactions on Software Engineering*, To appear
- 51. Miltiadis Allamanis, Earl T. Barr, Christian Bird, and Charles Sutton. Learning Natural Coding Conventions. In *Proceedings of the 22nd International Symposium on Foundations of Software Engineering*, 2014, ACM. (22%)
- 50. Ashish Gupta, Thomas Zimmermann, **Christian Bird**, Nachiappan Nagappan, Thirumalesh Bhat, and Syed Emran. Mining Energy Traces to Aid in Software Development: An Empirical Case Study. In *Proceedings of the International Symposium on Empirical Software Engineering and Measurement*, 2014, ACM/IEEE
- 49. Shaun Phillips, Thomas Zimmermann, and **Christian Bird**. Understanding and Improving Software Build Teams. In *Proceedings of the International Conference on Software Engineering*, 2014, IEEE. (20%)

- 48. Kivanç Muşlu, **Christian Bird**, Nachiappan Nagappan, and Jacek Czerwonka. Transition from Centralized to Decentralized Version Control Systems: A Case Study on Reasons, Barriers, and Outcomes. In *Proceedings of the International Conference on Software Engineering*, 2014, IEEE. (20%)
- 47. **Christian Bird**, Venkatesh Prasad Ranganath, Thomas Zimmermann, Nachiappan Nagappan, and Andreas Zeller. Extrinsic influence factors in software reliability: A study of 200,000 windows machines. In *Proceedings of the International Conference on Software Engineering (SEIP Track)*, 2014, IEEE. (21%)
- 46. Meiyappan Nagappan, Thomas Zimmermann, and Christian Bird. Diversity in software engineering research. In Proceedings of the the joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on The Foundations of Software Engineering (ESEC/FSE), 2013, ACM. (20%)
- 45. Peter C. Rigby, and **Christian Bird**. Convergent software peer review practices. In *Proceedings of the the joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on The Foundations of Software Engineering (ESEC/FSE)*, 2013, ACM. (20%)
- 44. Brendan Murphy, **Christian Bird**, Thomas Zimmermann, Laurie Williams, Nachiappan Nagappan, and Andrew Begel. Have Agile Techniques been the Silver Bullet for Software Development at Microsoft. In *Proceedings of the Seventh International Symposium on Empirical Software Engineering and Measurement*, 2013, ACM/IEEE. (28%)
- 43. Earl T. Barr, **Christian Bird**, and Mark Marron. Collecting a Heap of Shapes. In *Proceedings* of the International Symposium on Software Testing and Analysis, 2013, ACM. (25% Best Paper Award 2%)
- 42. Robert Musson, Jacqueline Richards, Danyel Fisher, **Christian Bird**, Brian Bussone, and Sandipan Ganguly. Leveraging the Crowd: How 48,000 Users Helped Improve Lync Performance. *IEEE Software*, 2013
- 41. Richard Harper, **Christian Bird**, Thomas Zimmermann, and Brendan Murphy. Dwelling in Software: aspects of the felt-life of engineers in large software projects. In *Proceedings of the European Conference on Computer-Supported Cooperative Work*, 2013
- 40. Alberto Bacchelli, and **Christian Bird**. Expectations, outcomes, and challenges of modern code review. In *Proceedings of the International Conference on Software Engineering*, 2013, IEEE. (18% nominated for Distinguished Paper 4%)
- 39. Emerson Murphy-Hill, Thomas Zimmermann, **Christian Bird**, and Nachiappan Nagappan. The design of bug fixes. In *Proceedings of the International Conference on Software Engineering*, 2013, IEEE. (18%)
- 38. Ekrem Kocaguneli, Thomas Zimmermann, **Christian Bird**, Nachiappan Nagappan, and Tim Menzies. Distributed development considered harmful? In *Proceedings of the International Conference on Software Engineering (Software Engineering in Practice Track)*, 2013, IEEE. (20%)
- 37. Peter C. Rigby, Earl T. Barr, **Christian Bird**, Premkumar Devanbu, and Daniel M. German. What Effect does Distributed Version Control have on OSS Project Organization. In *Proceedings of the International Workshop on Release Engineering*, 2013, IEEE

- 36. Murtuza Mukadam, **Christian Bird**, and Peter C. Rigby. Gerrit software code review data from android. In *Proceedings of the International Working Conference on Mining Software Repositories (Data Track)*, 2013, IEEE
- 35. Edward Smith, Robert Loftin, Emerson Murphy-Hill, **Christian Bird**, and Thomas Zimmermann. Improving Developer Participation Rates in Surveys. In *Proceedings of the International Workshop on Cooperative and Human Aspects of Software Engineering*, 2013, IEEE
- 34. Chris Parnin, **Christian Bird**, and Emerson Murphy-Hill. Adoption and Use of Java Generics. *Empirical Software Engineering*, 2012, 1–43
- 33. **Christian Bird**, and Thomas Zimmermann. Assessing the value of branches with what-if analysis. In *Proceedings of the 20th International Symposium on Foundations of Software Engineering*, 2012, ACM. (17% ACM Distinguished Paper Award)
- 32. Abram Hindle, **Christian Bird**, Thomas Zimmermann, and Nachiappan Nagappan. Relating requirements to implementation via topic analysis: Do topics extracted from requirements make sense to managers and developers? In *Proceedings of the 28th IEEE International Conference on Software Maintenance*, 2012, IEEE. (25%)
- 31. Emad Shihab, **Christian Bird**, and Thomas Zimmermann. The effect of branching strategies on software quality. In *Proceedings of the Sixth International Symposium on Empirical Software Engineering and Measurement*, 2012, ACM/IEEE. (25%)
- 30. Christian Bird, and Nachiappan Nagappan. Who? where? what? examining distributed development in two large open source projects. In *Proceedings of the International Working Conference on Mining Software Repositories*, 2012, IEEE. (28%)
- 29. Earl T. Barr, **Christian Bird**, Peter C. Rigby, Abram Hindle, Daniel M. German, and Premkumar Devanbu. Cohesive and Isolated Development with Branches. In *Proceedings of the International Conference on Fundamental Approaches to Software Engineering*, 2012, Springer. (24%)
- 28. Thomas Zimmermann, and **Christian Bird**. Collaborative Software Development in Ten Years: Diversity, Tools, and Remix Culture. In *Proceedings of the Workshop on The Future of Collaborative Software Development*, 2012
- 27. Foyzur Rahman, **Christian Bird**, and Premkumar Devanbu. Clones: What **is** that Smell? Empirical Software Engineering, An International Journal, 2012
- 26. Tim Menzies, Christian Bird, Tom Zimmermann, Wolfram Schulte, and Ekrem Kocaguneli. The Inductive Software Engineering Manifesto: Principles for Industrial Data Mining. In Proceedings of the International Workshop on Machine Learning Technologies in Software Engineering, 2011, ACM
- 25. Andreas Zeller, Thomas Zimmermann, and **Christian Bird**. Failure is a Four Letter Word: A Parody in Empirical Research. In *Proceedings of the 7th International Conference on Predictor Models in Software Engineering*, 2011
- 24. Qiaona Hong, Sunghun Kim, S. C. Cheung, and **Christian Bird**. Understanding a Developer Social Network and its Evolution. In *Proceedings of the 27th IEEE International Conference on Software Maintenance*, 2011, IEEE. (28%)

- 23. Christian Bird, Nachiappan Nagappan, Brendan Murphy, Harald Gall, and Premkumar Devanbu. Don't Touch My Code! Examining the Effects of Ownership on Software Quality. In Proceedings of the the eighth joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on The Foundations of Software Engineering, 2011, ACM. (17%)
- 22. Chris Parnin, **Christian Bird**, and Emerson Murphy-Hill. Java Generics Adoption: How New Features are Introduceded, Champion, or Ignored. In *Proceedings of the International Working Conference on Mining Software Repositories*, 2011. (33%, invited to Journal special issue: 10%)
- 21. Christian Bird, Thomas Zimmermann, and Alex Teterev. A Theory of Branches as Goals and Virtual Teams. In *Proceedings of the International Workshop on Cooperative and Human Aspects of Software Engineering*, 2011
- 20. Daryl Posnett, **Christian Bird**, and Premkumar Devanbu. An Empirical Study on the Influence of Pattern Roles on Change-Proneness. *Empirical Software Engineering*, An International Journal, 2010, 1–28
- 19. Earl Barr, **Christian Bird**, Eric Hyatt, Tim Menzies, and Gregorio Robles. On the Shoulders of Giants. In FSE/SDP Workshop on the Future of Software Engineering Research, 2010. (65%)
- 18. Adrian Bachmann, **Christian Bird**, Foyzur Rahman, Premkumar Devanbu, and Abraham Bernstein. The Missing Links: Bugs and Bug-fix Commits. In SIGSOFT '10/FSE-18: Proceedings of the 16th ACM SIGSOFT Symposium on Foundations of Software Engineering, 2010, ACM. (20%)
- 17. Daryl Posnett, **Christian Bird**, and Premkumar Devanbu. Thex: Mining Metapatterns in Java. In *Proceedings of the Seventh Working Conference on Mining Software Repositories*, 2010, IEEE Computer Society. (31%)
- 16. Roozbeh Nia, **Christian Bird**, Premkumar Devanbu, and Vladimir Filkov. Validity of network analyses in open source projects. In *Proceedings of the Seventh Working Conference on Mining Software Repositories*, 2010, IEEE Computer Society. (31%)
- 15. Foyzur Rahman, **Christian Bird**, and Premkumar Devanbu. Clones: What is that Smell? In *Proceedings of the Seventh Working Conference on Mining Software Repositories*, 2010, IEEE Computer Society. (31% Best Paper Award 1%)
- Christian Bird, Nachiappan Nagappan, Premkumar Devanbu, Harald Gall, and Brendan Murphy. Putting it All Together: Using Socio-Technical Networks to Predict Failures. In Proceedings of the 17th International Symposium on Software Reliability Engineering, 2009, IEEE Computer Society. (25%)
- 13. Christian Bird, Adrian Bachmann, Eirik Aune, John Duffy, Abraham Bernstein, Vladimir Filkov, and Premkumar Devanbu. Fair and Balanced? Bias in Bug-Fix Datasets. In Proceedings of the the Seventh joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on The Foundations of Software Engineering, 2009, ACM. (14%)
- 12. **Christian Bird**, Nachiappan Nagappan, Premkumar Devanbu, Harald Gall, and Brendan Murphy. Does Distributed Development Affect Software Quality? An Empirical Case Study of Windows Vista. *Communications of the ACM 52*, 8, August 2009, 85–93. (Revised edition of ICSE paper invited to Research Highlights in CACM)

- 11. **Christian Bird**, Nachiappan Nagappan, Premkumar Devanbu, Harald Gall, and Brendan Murphy. Does Distributed Development Affect Software Quality? An Empirical Case Study of Windows Vista. In *Proceedings of the 31st International Conference on Software Engineering*, 2009, IEEE Computer Society, pp. 518–528. (12% Best Paper Award 1%)
- Christian Bird, Peter C. Rigby, Earl T. Barr, David J. Hamilton, Daniel M. German, and Prem Devanbu. The Promises and Perils of Mining Git. In *Proceedings of the Sixth Working Conference on Mining Software Repositories*, 2009, IEEE Computer Society. (28%)
- 9. **Christian Bird**, Earl Barr, Andre Nash, Premkumar Devanbu, Vladimir Filkov, and Zhendong Su. Structure and Dynamics of Research Collaboration in Computer Science. In *Proceedings of the Ninth SIAM International Conference on Data Mining*, 2009, SIAM, pp. 826–837. (29%¹)
- 8. Christian Bird, David Pattison, Raissa D'Souza, Vladimir Filkov, and Premkumar Devanbu. Latent Social Structure in Open Source Projects. In SIGSOFT '08/FSE-16: Proceedings of the 16th ACM SIGSOFT Symposium on Foundations of Software Engineering, 2008, ACM, pp. 24–35. (20%)
- David Pattison, Christian Bird, and Premkumar Devanbu. Talk and Work: a Preliminary Report. In Proceedings of the Fifth International Working Conference on Mining Software Repositories, 2008, ACM, pp. 113–116. (40%)
- Zachary M. Saul, Vladimir Filkov, Premkumar Devanbu, and Christian Bird. Recommending Random Walks. In ESEC-FSE '07: Proceedings of the the Sixth joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on The Foundations of Software Engineering, 2007, ACM, pp. 15–24. (17%, nominated for Best Paper)
- Christian Bird, Alex Gourley, and Prem Devanbu. Detecting Patch Submission and Acceptance in OSS Projects. In *Proceedings of the Fourth International Workshop on Mining Software Repositories*, 2007, IEEE Computer Society, pp. 26–35. (38%)
- 4. **Christian Bird**, Alex Gourley, Prem Devanbu, Anand Swaminathan, and Greta Hsu. Open Borders? Immigration in Open Source Projects. In *Proceedings of the Fourth International Workshop on Mining Software Repositories*, 2007, IEEE Computer Society, p. 6. (38%)
- 3. Michael Ogawa, Kwan-Liu Ma, **Christian Bird**, Premkumar T. Devanbu, and Alex Gourley. Visualizing Social Interaction in Open Source Software Projects. In *Sixth International Asia-Pacific Symposium on Visualization*, 2007, pp. 25–32. (45%)
- 2. Christian Bird, Alex Gourley, Prem Devanbu, Michael Gertz, and Anand Swaminathan. Mining Email Social Networks. In *Proceedings of the Third International Workshop on Mining software repositories*, 2006, ACM, pp. 137–143. (35%)
- Christian Bird, Alex Gourley, Prem Devanbu, Michael Gertz, and Anand Swaminathan. Mining Email Social Networks in Postgres. In Proceedings of the Third International Workshop on Mining software repositories (Challenge Track), 2006, ACM, pp. 185–186

BOOK CHAPTERS

1. **Christian Bird**. Conway's Corollary. In *Making Software: What Really Works, and Why We Believe It*, A. Oram and G. Wilson, Eds. O'Reilly, 2010

 $^{^{1}}$ SDM paper accepted in full as a poster presentation paper. 15% of papers accepted for presentation and 14% were accepted as for poster presentation.

INVITED PAPERS, DEMO PAPERS, ETC.

- 4. Christian Bird. Sociotechnical Coordination and Collaboration in Open Source Software. In Doctoral Symposium, Proceedings of the 27th IEEE International Conference on Software Maintenance, 2011, IEEE
- 3. **Christian Bird**, Brendan Murphy, Nachiappan Nagappan, and Thomas Zimmermann. Empirical Software Engineering at Microsoft Research. In *Showcase Track, Proceedings of the ACM Conference on Computer Supported Cooperative Work*, 2011
- Foyzur Rahman, Christian Bird, and Premkumar Devanbu. Clones: What is that Smell? In Proceedings of the fourth International Symposium on Empirical Software Engineering and Measurement, 2010, IEEE Computer Society. (invited paper)
- Christian Bird, Adrian Bachmann, Foyzur Rahman, and Abraham Bernstein. Linkster: Enabling Efficient Manual Mining. In Demonstration Track, Proceedings of the 17th SIGSOFT Symposium on Foundations of Software Engineering, 2010, ACM. (accepted for formal demonstration, 21%)

INVITED TALKS

Lessons and Insights from Tech Transfers at Microsoft

October, 2014

Keynote, 4th Workshop on Mining Unstructured Data (colocated with ICSME 2015) Victoria, Britich Columbia, Canada

Investigations into Code Review at Microsoft and Beyond

November, 2013

University of Victoria

Victoria, British Columbia, Canada

Branch Analytics at Microsoft

November, 2012

University of Victoria

Victoria, British Columbia, Canada

Empirical Software Engineering at Microsoft Research: Transitioning Research into practice September, 2011

Brigham Young University

Provo, Utah, U.S.A.

SocioTechnical Effects in Software Teams

April, 2011

Hong Kong University of Science and Technology

Hong Kong

SocioTechnical Effects in Software Teams

February, 2010

Microsoft Research

Bangalore, India

Does Distributed Development Affect Software Quality?

February, 2010

Third India Software Engineering Conference

Mysore, India

Jazz Anthropology

January, 2010

T. J. Watson Research Center, IBM

Hawthorne, New York, U.S.A.

On the Effect of Ownership in Varying Software Processes

September, 2009

Microsoft Research

Redmond, Washington, U.S.A.

Latent Social Structure in Open Source Projects

October, 2008

INFORMS Annual Meeting Washington, D.C., U.S.A.

Does Distributed Development Affect Software Quality?

August, 2008

Microsoft Research

Redmond, Washington, U.S.A.

Social Organization in Open Source Software

March, 2008

T. J. Watson Research Center, IBM Hawthorne, New York, U.S.A.

Social Network Analysis in Software Teams

May, 2006

Guest Lecture, MAE 298, Understanding Networks: Theory and Applications University of California, Davis, U.S.A.

RESEARCH EXPERIENCE Researcher

October, 2011 – present

Empirical Software Engineering Group

Microsoft Research

Redmond, Washington, USA

Postdoctoral Researcher

August, 2010 - October, 2011

Empirical Software Engineering Group Microsoft Research Redmond, Washington, USA

Research Assistant

October, 2005 - June, 2010

Software Engineering under Prof. Premkumar Devanbu University of California, Davis, Davis, California, USA

Designed and implemented data mining software for study of OSS projects. Statistically analyzed OSS project data in the fields of social networking, change analysis, longitudinal social effects, acceptance of work gifts, etc. Continued background research in the area of empirical software engineering.

Researcher

November 2009 – January 2010

Governance Science Research Group under Clay Williams

T. J. Watson Research Center, IBM

Hawthorne, New York, USA

Developed a research amenable database schema for Jazz development data and implemented a mining framework for extracting relevant development data from Jazz repositories.

Researcher

June – September 2009

Research in Software Engineering Group under Nachiappan Nagappan Microsoft Research

Redmond, Washington, USA

Examined the effect of code ownership levels on software quality in various development contexts, including Windows Vista, Eclipse, and Firefox. Also examined distributed development in the context of different development process domains. This research resulted in an internal report, an external tech report, and two planned submissions to FSE 2010.

Researcher May – August 2008

Research in Software Engineering group under Nachiappan Nagappan

Microsoft Research

Redmond, Washington, USA

Conducted quantitative analysis on defect data related to development of Windows Vista and examined many sociotechnical factors and their relationship with defects. Examined the effect of geographical distributed development on software quality which resulted in a top tier publication at ICSE, earned a best paper award at ICSE, and was invited to appear in CACM Research Highlights. Also performed a study of the ability of network measures on sociotechnical networks to predict failures, which resulted in a paper in ISSRE.

Research Assistant June – October, 2005

Software Engineering under Prof. Raju Pandey University of California, Davis, Davis, California, USA

Worked on a framework for component oriented binary level synthesis for embedded systems. Wrote a static analysis tool for extracting type dependencies in GCC compliant C.

TEACHING EXPERIENCE

Teaching Assistant

October, 2004 – June, 2005

Programming Languages under Dr. Ron Olsson and Dr. Raju Pandey University of California, Davis

Davis, California, USA

Led discussion sections of senior level programming languages course for three quarters. Provided individual assistance to students during regularly scheduled office hours. Helped in the creation of homework assignments and exams. Evaluated students written work, programming projects, and exams.

Teaching Assistant

August, 1997 – December, 1997

Advanced Data Structures under Dr. Theodore Norman Brigham Young University

Provo, Utah, USA

Helped students understand advanced data structure concepts in group and one on one settings. Evaluated course homework, lab projects, and exams.

Industry Experience

Software Engineer

September, 2000 - December, 2005

Embedded Software Tools Group under Bruce Vernon Motorola

Lindon, Utah, USA

Helped design and develop command line and GUI tools for embedded linux developers using C, C++, python, and shell scripting. Aided in the creation of linux Board Support Packages for embedded hardware on a number of Motorola's hardware platforms. Maintained a collaborative intranet web system for the embedded linux group. Provided remote and on-site training to Motorola employees and third parties in the use of our tools.

Technical Support Engineer

Technical Support Department under Allen Smart

Caldera Systems Inc.

Provo, Utah, USA

Learned advanced Linux operating system and programming concepts. Provided technical support to corporate customers for their use of Linux. Helped design an efficient technical support structure for a rapidly growing Linux technology company.

ACADEMIC SERVICE

Reviewer

Communications of the ACM, 2010

ACM Transactions on Software Engineering and Methodology, 2009, 2010, 2011, 2012, 2013

IEEE Transactions on Software Engineering, 2009, 2010, 2011, 2012, 2013, 2014

IEEE Software, 2008, 2011, 2012, 2013

IEEE Intelligent Systems, 2009, 2010

Journal of Systems and Software, 2009, 2011, 2012

Journal of Information and Software Technology, 2009, 2011

Journal of Empirical Software Engineering, 2009, 2010, 2011, 2012

Journal of Software: Evolution and Process, 2012

Journal of Software Testing, Verification & Reliability, 2014

Software Quality Journal, 2011

International Symposium on Software Testing and Analysis, 2012

International Conference on Software Engineering, 2008, 2009, 2013

International Conference on Software Engineering (SEIP Track), 2015

ACM Conference on Computer Supported Cooperative Work, 2008, 2012, 2013

International Working Conference on Mining Software Repositories, 2007, 2008, 2009

European Conference on Object Oriented Programming, 2009

Haifa Verification conference, 2011

ACM Conference on Recommender Systems, 2009

Science of Computer Programming, 2011

Program Committee Memberships

International Conference on Software Engineering, 2014, 2016

ACM Sigsoft Symposium on Foundations of Sofware Engineering, 2012

International Conference on Automated Software Engineering, 2014, 2015

International Symposium on Empirical Software Engineering and Measurement, 2015

Indian Software Engineering Conference, 2015

International Symposium on Software Reliability Engineering, Industrial track, 2013

International Conference on Software Maintenance, 2012, 2013, 2014

International Conference on Program Comprehension, 2012, 2014

International Conference on Predictor Models in Software Engineering, 2013

International Conference on Software Engineering Advances, 2013

International Working Conference on Mining Software Repositories, 2010, 2011, 2012, 2013, 2015

International Conference on Global Software Engineering, 2015

International Conference on Software Engineering and Applications, 2014

International Conference on Software Analysis, Evolution and Reengineering, 2015, 2016

International Symposium on Software Crowdsourcing, 2015

ACM Student Research Competition (at ICSE), 2012

Formal Research Demonstrations track at ICSE, 2014

Int'l Symposium on Empirical Software Engineering and Measurement, Industrial track, 2011

International Conference on Software Maintenance, Early Achievements track, 2011

European Soft. Eng., Conf./Foundations of Soft. Eng., Artifact Evaluation Committee, 2011

 $\hbox{Euromicro Conference on Software Engineering and Advanced Applications Special Session on }$

Estimation and Prediction in Software & Systems Engineering, 2012, 2014

2nd SEMAT Workshop on a General Theory of Software Engineering (GTSE) 2013,

International Workshop on Regression Testing, 2012, 2013

International Workshop on Machine Learning Technologies in Software Engineering, 2011

International Workshop on Empirical Software Engineering in Practice, 2010, 2011, 2012, 2013

International Workshop on Replications in Empirical Software Engineering Research, 2010, 2011

International Workshop on Emerging Trends in FLOSS Research and Development, 2010

International Workshop on the General Theory of Software Engineering, 2013

Challenge Track of Mining Software Repositories, 2008, 2009

Data Track of Mining Software Repositories, 2014

Program Committee Chair Positions

International Conference on Program Comprehension (co-chair), 2015

International Workshop on Replications in Software Engineering, 2013

International Workshop on Data Analysis Patterns in Software Engineering (DAPSE), 2013

International Workshop on Release Engineering (RelEng), 2013

International Conference on Program Comprehension, Industry Track (co-chair), 2013

Challenge Track of Mining Software Repositories, 2009

Organizing Committee Positions

International Workshop on Data Analysis Patterns in Software Engineering (DAPSE), 2013, 2014 International Workshop on Release Engineering (RelEng), 2013, 2014 International Workshop on Replications in Software Engineering, 2013

Conference Service

Student Volunteer Chair, Sigsoft Symposium on Foundations of Software Engineering, 2014

Thesis Committees

Adrian Schröter, Ph.D., University of Victoria, 2012 Jordan Ell, M.S., University of Victoria, 2014

Member, Institute of Electrical and Electronics Engineers (IEEE)

2005-present

Member, ACM Special Interest Group on Software Engineering (SIGSOFT)

2005-present

EXTRACURRICULAR Software Engineering and Programming Languages Seminar Organizer

2006-2008

References Premkumar Devanbu

Professor

University of California, Davis Dept. of Computer Science

Kemper Hall 1 Shields Avenue Davis, CA, USA 95616 ptdevanbu@ucdavis.edu

Nachiappan Nagappan

Researcher

Microsoft Research

One Microsoft Way

Redmond, WA, USA 98052 nachin@microsoft.com

Harald Gall

Professor University of Zürich Dept. of Computer Science Binzmühlestrasse 14 CH-8050 Zürich, Switzerland gall@ifi.uzh.ch

James Herbsleb

Professor, Institute for Software Research Director, Software Industry Center School of Computer Science 5321 Wean Hall Carnegie Mellon University 5000 Forbes Avenue Pittsburgh, PA 15213 jdh@cs.cmu.edu

Audris Mockus

Researcher Avaya Labs Research Rm 2D-30 233 Mt. Airy Road Basking Ridge, NJ 07920 audris@research.avayalabs.com