

Curriculum Vitae

Marc Fisher II

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Education

Ph.D. in Computer Science, University of Nebraska - Lincoln, August 2008.

Dissertation Title: Probing Analysis of Closed Components

M.S. in Computer Science, Oregon State University, August 2002.

Thesis Title: Helping End Users Create and Manage Test Cases in the WYSIWYT Methodology

B.S. in Computer Science, Oregon State University, August 2000.

Computer Science, Eastern Nazarene College.

Professional Experience

Post-doctoral Researcher, Department of Computer Science, Virginia Tech, 2008 - present.

Research Consultant and Co-Founder, RedRover Software, Inc., 2006 - 2008.

Research Assistant, Department of Computer Science and Engineering, University of Nebraska - Lincoln, 2004 - 2008.

Research Assistant, Department of Computer Science, Oregon State University, 2000 - 2004.

Web Application Developer, Matrix Digital Media, Inc., 2000 - 2002

Teaching Experience

Co-Instructor (with Sebastian Elbaum), CSCE 322: Programming Languages, Department of Computer Science and Engineering, University of Nebraska - Lincoln, Fall Semester 2007.

Co-Organizer (with Joseph Ruthruff), CS 302: Computer Science Orientation, Oregon State University, Fall Semester 2003.

Refereed Journal Articles

- M. Fisher II, G. Rothermel, D. Brown, M. Cao, C. Cook, M. Burnett, *Integrating automated test case generation into the WYSIWYT spreadsheet testing methodology*, ACM Transactions on Software Engineering and Methodology, V. 15, No. 2, April, 2006, pages 150 - 194.
- S. Elbaum, G. Rothermel, S. Karre, M. Fisher II, *Leveraging user session data to improve web application testing*, IEEE Transactions on Software Engineering, V. 31, No. 3, March, 2005, pages 187 - 202.

Refereed Conference Papers

- A. Ibrahim, W. Cook, M Fisher II, E. Tilevich, *Remote batch invocation for web services: Document-oriented web services with object-oriented interfaces*, European Conference on Web Services, November, 2009, to appear.
- M. Fisher II, S. Elbaum, G. Rothermel, *Dynamic characterization of web application interfaces*, Fundamental Approaches to Software Engineering, March, 2007, pages 260 - 275. (31 of 141 submissions accepted – 22%)
- M. Fisher II, G. Rothermel, T. Creelan, M. Burnett, *Scaling a dataflow testing methodology to the multiparadigm world of commercial spreadsheets*, Proceedings of the IEEE International Symposium on Software Reliability Engineering, November, 2006, pages 13 - 22. (38 of 102 submissions accepted – 37%)
- J. Carver, M. Fisher II, G. Rothermel, *An empirical evaluation of a testing and debugging methodology for Excel*, Proceedings of the IEEE-ACM International Symposium on Empirical Software Engineering, September, 2006, pages 278 - 287. (40 of 87 submissions accepted – 46%)
- J. Ruthruff, E. Creswick, M. Burnett, C. Cook, S. Prabhakararao, M. Fisher II, M. Main, *End-user software visualizations for fault localization*, Proceedings of the ACM Symposium on Software Visualization, June, 2003, pages 123 - 132. (20 of 65 submissions accepted – 30%)
- M. Fisher II, D. Jin, G. Rothermel, M. Burnett, *Test reuse in the spreadsheet paradigm*, Proceedings of the IEEE International Symposium on Software Reliability Engineering, November, 2002, pages 257 - 268. (33 of 73 submissions accepted – 45%)
- M. Fisher II, M. Cao, G. Rothermel, C. Cook, M. Burnett, *Automated test case generation for spreadsheets*, Proceedings of the International Conference on Software Engineering, May, 2002, pages 230 - 240. (45 of 303 submissions accepted – 15%)

Workshop Papers

- S. Elbaum, K.-R. Chilakamarri, M. Fisher II, G. Rothermel, *Web application interfaces characterization through directed requests*, Proceedings of the International Workshop on Dynamic Analysis, May, 2006, pages 49 - 56.
- M. Fisher II, G. Rothermel, *The EUSES Spreadsheet Corpus: A shared resource for supporting experimentation with spreadsheet dependability mechanisms*, Proceedings of the Workshop on End User Software Engineering, May, 2005, pages 47 - 51.

Technical Reports

- M. Fisher II and S. Elbaum and G. Rothermel, *Automated refinement and augmentation of web service description files*, Department of Computer Science and Engineering, University of Nebraska - Lincoln, Technical Report TR-UNL-CSE-2007-0026, December, 2007.
- T. Creelan, M. Fisher II, *Scaling up an end-user dependability framework for spreadsheets*, Technical Report 40-60-09, School of Electrical Engineering and Computer Science, Oregon State University, August, 2004.

Mentoring and Advising

- Luke Marrs, Visualizing a blended escape analysis for Java (2009, REU with Barbara Ryder)
- Shrutarshi Basu, The effects of program representation on a blended escape analysis (2009, Undergraduate research with Barbara Ryder)
- Tyler Creelan, Porting end-user software engineering devices from Forms/3 to Excel (2004, M.S. Project with Gregg Rothermel)
- Darren Brown, Empirical evaluation of automated test case generation algorithms in the WYSIWYT methodology (with Gregg Rothermel)

Committee Member: Dongkwan Kim (Ph.D., 2009), Myoungku Song (M.S., in progress)

Reviewer

- International Conference on Software Maintenance 2009
IEEE Software 2009
Journal of Software Testing, Verification, and Reliability 2006, 2008, 2009
International Conference on Software Engineering 2004, 2006, 2009
Information and Software Technology 2006, 2007, 2008
European Software Engineering Conference and ACM SIGSOFT Symposium on the Foundations of Software Engineering 2007
IEEE Transactions on Software Engineering 2005
ACM Symposium on Software Visualization 2003
International Symposium on Software Testing and Analysis 2002

Program Committees

- International Conference on Software Maintenance 2009 Tools Track

Committee Assignments and Service

Graduate Committee, University of Nebraska - Lincoln (2005 - 2006)

Facilities Committee, University of Nebraska - Lincoln (2004 - 2005)

Student Volunteer, ISSTA 2004

Computer Science Graduate Student Association Vice-President, Oregon State University (2003-2004)

Student Volunteer, ICSE 2003

Graduate Committee, Oregon State University (2001 - 2002)

Professional Associations

Association of Computing Machinery (ACM)

ACM Special Interest Group on Software Engineering (SIGSOFT)

IEEE Computer Society

Upsilon Pi Epsilon, 2001 - 2004

Awards

Jensen Chair Graduate Research Assistant Fellowship, University of Nebraska - Lincoln, 2004 - 2008.

ISSRE 2006 Student Travel Award.

SIGSOFT CAPS Travel Award for ISESE 2006.

Freshman Math and Computer Science Student of the Year, Eastern Nazarene College, 1996.