

EMILY HILL

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314 Hall of Science (HS) · (973) 408-3198
Department of Mathematics & Computer Science
Drew University · Madison, NJ 07940

EDUCATION

- Ph.D. in Computer Science**, University of Delaware, Newark, DE: August 2010.
Thesis: *Developing Natural Language-based Software Analyses & Tools to Expedite Software Maintenance*.
Advisors: Dr. Lori Pollock & Dr. K. Vijay-Shanker.
- M.S. in Computer Science**, University of Delaware, Newark, DE: May 2005.
- B.S. in Computer Science**, Minor in Mathematics, The College of New Jersey, Ewing, NJ: May 2003.

PROFESSIONAL EXPERIENCE

- Assistant Professor**, Department of Mathematics & Computer Science, Drew University, Madison, NJ: Fall 2014 - present.
- Assistant Professor**, Department of Computer Science, College of Sciences and Mathematics, Montclair State University, Montclair, NJ: Fall 2010 - 2014.

TEACHING EXPERIENCE

Drew University

- CSCI 117**, Introduction to Computers and Computing: 2014-2015.
- CSCI 151**, Object Oriented Programming in Java: Spring 2015.
- CSCI 340**, Software Engineering: Spring 2015.
- CSCI 350**, Net-centric computing: Fall 2014.
- CSCI 400**, Capstone: Spring 2015.

Montclair State University

- CMPT 109**, Introduction to Computer Applications (*online*): Fall 2011, 2012, 2013.
- CMPT 183**, Foundations of Computer Science I: Fall 2010, 2011, 2012, 2013.
- CMPT 184**, Foundations of Computer Science II: Spring 2011, 2012, 2013, 2014.
- CMPT 481**, Operating Systems: Spring 2013.
- CMPT 495**, Undergraduate Independent Study in Software Engineering: 2011-2014.
- CMPT 584**, Operating Systems: Spring 2013.
- CMPT 594**, Software Engineering & Reliability: Spring 2012, 2013, 2014.
- CMPT 697**, Master's Project in Computer Science: Spring 2012, Fall 2012.

University of Delaware

- CISC 672**, Advanced Compiler Construction: Spring 2005 (TA).
- CISC 474**, Advanced Web Technologies: Spring 2005 (TA).
- CISC 105**, General Computer Science: Spring 2004 (TA), Summer 2004.
- CISC 181**, Introduction to Computer Science: Fall 2004 (TA).
- CISC 101**, Computer & Information Systems: Winter 2004.

STUDENT RESEARCH MENTORING

Drew University

1. Wyatt Olney, "Summarizing source code for beginning programmers," independent research in preparation for senior thesis, Spring 2015.
2. Anastasia Kolovani, "Socially Aware Computing," independent study, Spring 2015.
3. Adam Fanslau, "Recommending Learning Resources for Computer Science Students," senior honors thesis, Fall 2014 - Spring 2015.

Montclair State University

4. Travis Gant, "Developing and Deploying a Mobile Application Platform to Facilitate Environmental Research and Education," Masters Project, Summer - Fall 2014.
5. Adebisi (Bisi) Adenipekun, "Geotagger: An application to facilitate and promote collaborative, scientific inquiry", Masters Project, Spring - Fall 2014.
6. Kevin Young, "Documenting & Refactoring an Android Mobile Science Toolkit," undergraduate independent study, Summer 2014.
7. Leah Dave, "Automatically Extracting Comments in Java," CREU funded undergraduate research project, Fall 2013 - Spring 2014.
8. Kathy Chowniac, "Automatically Extracting a Software Word Usage Model from Java Comments," CREU funded undergraduate research project, Spring 2013 - Spring 2014.
9. Kira Mathias Prabhu, "Automatic Extraction of Code Island Queries for Bug Localization," volunteer high school student research project, Summer - Fall 2013.
10. Cynthia Alvarez, "Automatically Extracting Queries from Maintenance Requests," undergraduate independent study, Spring 2013 - Fall 2013.
11. Spencer Kordecki, "Building a Mobile Android Application for Sustainability Science," paid undergraduate research, Summer 2013 - Spring 2014.
12. David Dymko, paid undergraduate research:
 - "Building a Mobile Android Application for Sustainability Science," Summer 2013 - Summer 2014.
 - "Automatically Extracting a Software Word Usage Model for Java and C++," Spring 2013.
13. Sowmya Bandela, "Evaluating the Use of Textual Information in Debugging Software Systems," Masters Project, Fall 2012.
14. Michael Morley, "Analyzing the Impact of Phrasal Concepts on Source Code Search," undergraduate independent study, Summer 2012 - Summer 2014.
15. Kaushal Kathwadia, "Investigating the Impact of Phrasal Concepts on Source Code Search," undergraduate independent study, Spring 2012.
16. Jenn Schiffer, "Development of a Grading Rubric Student Feedback Software System for Online Education," Masters Project, Spring 2012.
17. Marvin Lapeine, "Bioinformatics and Drug Discovery," Science Honors Innovation Program, co-advised with Dr. Herbert, Fall 2011.
18. Darryl Price, "Development of a Software Quality Assurance Center for Excellence at MSU," undergraduate independent study, Fall 2011.
19. Manuel Roldan-Vega, "Investigating Contextual Query Reformulation with SWUM-based Software Search," undergraduate independent study and paid research, Summer 2011 - Spring 2013.

20. James Taveras, "Technology Needs for Combining Global and Local Concern Location Techniques," undergraduate independent study, Summer 2011.
21. Daisy Lorenzo, "Exploring Word Usage Relationships between Maintenance Requests and Source Code for Bug Localization," paid undergraduate research, Summer 2011 - Fall 2011.
22. Valerie Ho, paid undergraduate research, Spring 2011 - Fall 2011.
 - "Exploring Word Usage Relationships between Maintenance Requests and Source Code for Bug Localization," Summer-Fall 2011.
 - "Comparing Word Stemmers for Source Code Analysis," Spring 2011.
23. Andrew Wiese, "Comparing Word Stemmers for Source Code Analysis," paid undergraduate research, Spring 2011.

University of Delaware

Under supervision and collaboration with Drs. Pollock and Shanker.

24. Eric Enslin, "Mining Source Code to Automatically Split Identifiers for Source Code Analysis," Research Experience for Undergraduates, 2009.
25. Sana Malik, "Extending and Evaluating a Software Word Usage Model for C/C++," CRA-W Distributed Research Experience for Undergraduates (DREU), 2009.
26. Jon Schall, "Towards Generating Useful Comments for Program Code," Research Experience for Undergraduates, 2009.
27. Haley Boyd, "Analyzing Word Usage in Software to Improve Software Maintenance Tools," Research Experience for Undergraduates, 2008.
28. Zachary P. Fry, "Automatically Mining Abbreviation Expansions from Software." Senior Honors Thesis, 2008.
29. Yana Novikova, "Integrating Information Retrieval with NLP for a Program Navigation Tool." Undergraduate independent study, 2007.
30. Meilani Williams, "Preposition Word Usage in Software." CRA-W Distributed Mentor Program, Summer 2007.

GRANTS AWARDED

1. **NSF S-STEM:** \$624,540 (2013-2018). "Networking and Engaging in Computer Science and Technology in Northern New Jersey Program," PIs: Katherine Herbert, Donal MacVeigh, Thomas Marlowe, [Emily Hill](#), Jerry Fails.
2. **CRA-W Collaborative Research Experience for Undergraduates (CREU):** \$7,000 (2013-2014). "Automatically Extracting Comments in Java," PIs: Kathy Chowniac, Leah Dave, [Emily Hill](#). 2 x \$3,000 stipends during the academic year and up to \$1500 travel reimbursement to pursue undergraduate research.
3. **PSEG Institute for Sustainability Studies:** \$30,000 (2012-2013). "Towards a Mobile Exploratory Research and Data Analytics Platform for Environmental & Ecological Sustainability Studies," PIs: [Emily Hill](#), Katherine Herbert
4. **NSF Award CNS-1205321:** \$38,307 (2012-2013). PI: [Emily Hill](#). Collaborative Research: Advanced Text Analysis Infrastructure for Software Engineering. In collaboration with University of Delaware (Lori Pollock, PI; Vijay Shanker, Co-PI) and Wayne State University (Andrian Marcus, PI).
5. **NSF Award CCF-0915803:** \$496,913 (2009-2012). PIs: Lori Pollock and K. Vijay-Shanker
6. **NSF Award CCF-070240:** \$444,750 (2007-2010). PIs: Lori Pollock and K. Vijay-Shanker
7. **NSF Graduate Research Fellowship:** full tuition and stipend (2005-2008).

GRANT APPLICATIONS

8. **NSF SHF:SMALL:** \$499,017 (2015-2018). "Assisting Developers in the Creation and Maintenance of Unit Tests," PI: [Emily Hill](#). In collaboration with University of Delaware (James Clause, PI).

9. **Google Faculty Research Award:** \$30,120 (2014-2015). "Helping Developers Write Effective Test Oracles," PI: [Emily Hill](#). In collaboration with University of Delaware (James Clause, PI).
10. **NY Sea Grant Institute:** \$150,000 (2014-2015). "CrisisTagger: An Interdisciplinary Approach to Supporting Communication and Decision-Making in a Coastal Storm Crisis," PIs: Katherine Herbert, Paul Bologna, Jennifer Bragger, [Emily Hill](#), Jerry Fails
11. **Google Faculty Research Award:** \$39,643 (2013-2014). "Identifying Natural Language and Structural Signals in Source Code for Software Maintenance Search," PI: [Emily Hill](#)
12. **PSEG Institute for Sustainability Studies Pre-Proposal:** \$80,000 (2011-2012). "An exploratory approach to restoring healthy and sustainable urban ecosystems," PIs: Jennifer Adams Krumins, [Emily Hill](#), Katherine Herbert

BOOK CHAPTERS

1. Lori Pollock, K. Vijay-Shanker, [Emily Hill](#), Giriprasad Sridhara, and David Shepherd. Natural Language-based Software Analyses and Tools for Software Maintenance, In De Lucia, A., Ferrucci, F. (eds.) *Software Engineering, International Summer Schools, ISSSE 2009-2011*, Salerno, Italy, Revised Tutorial Lectures, LNCS 7171, pp.102-134, Springer (2012).

JOURNAL PUBLICATIONS

2. [Emily Hill](#), Dave Binkley, Dawn Lawrie, Lori Pollock, K. Vijay-Shanker. "An empirical study of identifier splitting techniques." *Empirical Software Engineering*, 2013. (2012 Impact Factor 1.180)
3. Thomas Fritz, Gail Murphy, Emerson Murphy-Hill, Jingwen Ou, and [Emily Hill](#). "Degree-of-Knowledge: Modeling a Developer's Knowledge of Code." *Transactions on Software Engineering and Methodology*, 2014. (2012 Impact Factor 1.55)
4. **Zachary P. Fry**, David Shepherd, [Emily Hill](#), Lori Pollock, K. Vijay-Shanker. "Analyzing Source Code: Looking for Useful Verb-Direct Object Pairs in All the Right Places." *IET Software Special Issue on Natural Language in Software Development*, 2008. (2012 Impact Factor 1.180)
5. Sreedevi Sampath, Sara Sprenkle, [Emily Gibson](#), Lori Pollock, Amie Souter Greenwald. "Applying Concept Analysis to User-session-based Testing of Web Applications." *IEEE Transactions on Software Engineering*, Oct 2007. (2012 Impact Factor 2.59)

REFEREED CONFERENCE & WORKSHOP PUBLICATIONS * *students in bold*

6. Katherine G. Herbert, Jerry Alan Fails, [Emily Hill](#), **Andrew J. De Stefano**, **Varsha Nimbagal**, **Nikita S. Panchariya**, **Revathi Ragupathy** and **Serkan Yavuz**. "Current Developments in Big Data and Sustainability Sciences in Citizen Science." *IEEE Big Data Service*, 2015.
7. Katherine G. Herbert, [Emily Hill](#), Jerry Alan Fails, **Joseph O. Ajala**, **Richard T. Boniface**, and **Paul W. Cushman**. "Scientific Data Infrastructure for Sustainability Science Mobile Applications." *IEEE Big Data*, 2014.
8. [Emily Hill](#), **Manuel Roldan-Vega**, Jerry Alan Fails, and **Greg Mallet**. "NL-based Query Refinement and Contextualized Code Search Results: A User Study." *IEEE 2014 Software Evolution Week: Joint Meeting of the European Conference on Software Maintenance and Reengineering and the Working Conference on Reverse Engineering (CSMR-WCRE)*, Feb 2014.
9. [Emily Hill](#), Bunyamin Sisman, Avinash Kak. "On the Use of Positional Proximity in IR-based Feature Location." *IEEE 2014 Software Evolution Week: Joint Meeting of the European Conference on Software Maintenance and Reengineering and the Working Conference on Reverse Engineering (CSMR-WCRE), Early Research Achievements (ERA) Track*, Feb 2014.
10. Jerry Alan Fails, **Christopher Loeschorn**, Katherine Herbert, [Emily Hill](#), **Spencer Kordecki**, **David Dymko**, **Andrew DeStefano**, and **Zill Christian**. "GeoTagger: A Collaborative and Participatory Environmental Inquiry System." *ACM Computer Supported Cooperative Work and Social Computing*, Feb 2014.
11. [Emily Hill](#), David Shepherd, Lori Pollock and Vijay Shanker. "Differentiating Roles of Program Elements in Action-Oriented Concerns." *Proceedings of the 29th IEEE International Conference on Software Maintenance, Early Research Achievements (ERA) Track*, Sep 2013.

12. Emily Hill, Alberto Bacchelli, Dave Binkley, Bogdan Dit, Dawn Lawrie and Rocco Oliveto. "Which Feature Location Technique is Better?" *Proceedings of the 29th IEEE International Conference on Software Maintenance, Early Research Achievements (ERA) Track*, Sep 2013.
13. **Manuel Roldan-Vega**, **Greg Mallet**, Emily Hill and Jerry Falls. "CONQUER: A Tool for NL-based Query Refinement and Contextualizing Source Code Search Results." *Proceedings of the 29th IEEE International Conference on Software Maintenance, Tool Demo Track*, Sep 2013.
14. Dave Binkley, Dawn Lawrie, Emily Hill, Janet Burge, Ian Harris, Regina Hebig, Oliver Keszöcze, Karl Reed and John Slankas. "Task Driven Software Summarization." *Proceedings of the 29th IEEE International Conference on Software Maintenance, Early Research Achievements (ERA) Track*, Sep 2013.
15. **Marvin Lapeine**, Katherine G. Herbert, Emily Hill, Nina M. Goodey. "Mobile interaction and query optimization in a protein-ligand data analysis system." *Proceedings of the ACM SIGMOD International Conference on Management of Data*, Jun 2013.
16. David Binkley, Dawn Lawrie, Lori L. Pollock, Emily Hill, K. Vijay-Shanker. "A dataset for evaluating identifier splitters." *Proceedings of the 10th Working Conference on Mining Software Repositories*, May 2013.
17. Emily Hill, Shivani Rao, Avinash Kak. "On the Use of Stemming for Concern Location and Bug Localization in Java." *Proceedings of the 12th IEEE International Working Conference on Source Code Analysis and Manipulation*, Sep 2012.
18. Emily Hill, Lori Pollock, and K. Vijay-Shanker. "Improving Source Code Search with Natural Language Phrasal Representations of Method Signatures." *Proceedings of the 26th IEEE International Conference on Automated Software Engineering (ASE'11)*, Nov 2011.
19. **Andrew Wiese**, **Valerie Ho**, Emily Hill. "A Comparison of Stemmers on Source Code Identifiers for Software Search." *Proceedings of the 2011 IEEE International Conference on Software Maintenance (ICSM'11), Early Research Achievements (ERA) Track*, Sep 2011.
20. Emily Hill, Lori Pollock, and K. Vijay-Shanker. "Investigating How to Effectively Combine Static Concern Location Techniques." *Proceedings of the 3rd ICSE Workshop on Search-driven Development: Users, Infrastructure, Tools and Evaluation (SUITE'11)*, May 2011.
21. Giriprasad Sridhara, Emily Hill, Divya Muppaneni, Lori Pollock, K. Vijay-Shanker. "Towards Automatically Generating Summary Comments for Java Methods." *International Conference on Automated Software Engineering (ASE)*, Sep 2010. Distinguished Paper Award, 18% acceptance rate.
22. Emily Hill, Lori Pollock, and K. Vijay-Shanker. "Automatically Capturing Source Code Context of NL-Queries for Software Maintenance and Reuse." *International Conference on Software Engineering (ICSE)*, May 2009. 12% acceptance.
23. **Eric Enslen**, Emily Hill, Lori Pollock, K. Vijay-Shanker. "Mining Source Code to Automatically Split Identifiers for Software Analysis." *6th Working Conference on Mining Software Repositories (MSR)*, May 2009. 29% acceptance rate.
24. Giriprasad Sridhara, Emily Hill, Lori Pollock, and K. Vijay-Shanker. "Identifying Word Relations in Software: A Comparative Study of Semantic Similarity Tools." *16th IEEE International Conference on Program Comprehension (ICPC)*, Jun 2008. 35% acceptance rate.
25. Emily Hill, **Zachary P. Fry**, **Haley Boyd**, Giriprasad Sridhara, **Yana Novikova**, Lori Pollock, K. Vijay-Shanker. "AMAP: Automatically Mining Abbreviation Expansions in Programs to Enhance Software Maintenance Tools." *5th Working Conference on Mining Software Repositories (MSR)*, May 2008. Best Paper Award, 40% acceptance rate.
26. Emily Hill. "Developing Natural Language-based Program Analyses & Tools to Expedite Software Maintenance." Doctoral Symposium at the *International Conference on Software Engineering*, May 2008. 25% acceptance rate.
27. Emily Hill, Lori Pollock, K. Vijay-Shanker. "Exploring the Neighborhood with Dora to Expedite Software Maintenance." *International Conference on Automated Software Engineering (ASE)*, Nov 2007. 12% acceptance rate.
28. Sara Sprenkle, Emily Hill, Lori Pollock. "Learning Effective Oracle Comparator Combinations for Web Applications." *First International Workshop on Software Test Evaluation*, Oct 2007.

29. Thomas Fritz, Gail Murphy, [Emily Hill](#). "Does a Programmer's Activity Indicate Knowledge of Code?" *6th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE)*, Sep 2007. 17% acceptance rate.
30. Lori Pollock, K. Vijay-Shanker, David Shepherd, [Emily Hill](#), Zachary P. Fry, Kishen Maloor. "Introducing Natural Language Program Analysis." *Workshop on Program Analysis for Software Tools & Engineering*, ACM, Jun 2007.
31. David Shepherd, Zachary P. Fry, [Emily Hill](#), Lori Pollock, K. Vijay-Shanker. "Using Natural Language Program Analysis to Locate and Understand Action-Oriented Concerns." *International Conference on Aspect Oriented Software Development*, Mar 2007. 18% acceptance rate.
32. Sreedevi Sampath, Sara Sprenkle, [Emily Gibson](#), Lori Pollock. "Web Application Testing with Customized Test Requirements—An Experimental Comparison Study." *International Symposium on Software Reliability Engineering*, Nov 2006. 34% acceptance rate.
33. Sara Sprenkle, [Emily Gibson](#), Sreedevi Sampath, Lori Pollock. "A Case Study of Automatically Creating Test Suites from Web Application Field Data." *Workshop on Testing, Analysis and Verification of Web Services and Applications*, ACM, Jul 2006.
34. Sreedevi Sampath, Sara Sprenkle, [Emily Gibson](#), and Lori Pollock. "Integrating Customized Test Requirements with Traditional Requirements in Web Application Testing." *Workshop on Testing, Analysis and Verification of Web Services and Applications*, ACM, Jul 2006.
35. Sara Sprenkle, [Emily Gibson](#), Sreedevi Sampath, Lori Pollock. "Automated Replay and Failure Detection for Web Applications." *International Conference on Automated Software Engineering*, Nov 2005. 9% acceptance rate.
36. Sara Sprenkle, Sreedevi Sampath, [Emily Gibson](#), Lori Pollock, Amie Souter. "An Empirical Comparison of Test Suite Reduction Techniques for User-session-based Testing of Web Applications." *International Conference on Software Maintenance*, Sep 2005. 31% acceptance rate.
37. Sreedevi Sampath, Sara Sprenkle, [Emily Gibson](#), Lori Pollock, and Amie Souter. "Analyzing Clusters of Web Application User Sessions." *Workshop on Dynamic Analysis*, May 2005.
38. David Shepherd, [Emily Gibson](#), Lori Pollock. "Design and Evaluation of an Automated Aspect Mining Tool." *2004 International Conference on Software Engineering Research and Practice*, Jun 2004. 31% acceptance rate.

OTHER PUBLICATIONS

39. Lori L. Pollock, David Binkley, Dawn Lawrie, [Emily Hill](#), Rocco Oliveto, Gabriele Bavota, Alberto Bacchelli. "1st international workshop on natural language analysis in software engineering (NaturaliSE 2013)". *Proceedings of the 35th International Conference on Software Engineering*, May 2013.

REFEREED STUDENT-PRESENTED POSTERS

1. **Kathy Chowniac, Leah Dave, [Emily Hill](#)**. "Automatically Extracting a Software Word Usage Model from Java Comments". General Poster Session, Grace Hopper Celebration of Women in Computing, Oct 2014.
2. Jerry Alan Fails, **Christopher Loeschorn**, Katherine Herbert, [Emily Hill](#), **Spencer Kordecki, David Dymko, Andrew DeStefano**, and **Zill Christian**. "GeoTagger: A Collaborative and Participatory Environmental Inquiry System." *ACM Computer Supported Cooperative Work and Social Computing*, Feb 2014.
3. **Marvin Lapeine**, Katherine G. Herbert, [Emily Hill](#), Nina M. Goodey. "Mobile interaction and query optimization in a protein-ligand data analysis system." *ACM SIGMOD International Conference on Management of Data*, Jun 2013.
4. **Andrew Wiese, Valerie Ho, [Emily Hill](#)**. "A Comparison of Stemmers on Source Code Identifiers for Software Search." *IEEE International Conference on Software Maintenance (ICSM'11), Early Research Achievements (ERA) Track*, Sep 2011.

INVITED PRESENTATIONS

1. OOPSLE
2. "Evaluating Feature Location Techniques for Software Maintenance." Montclair State University Language & Information Brown Bag, Fall 2013.

3. "Developing Natural Language-based Software Analyses & Tools to Expedite Software Maintenance." Microsoft Research, Fall 2011.
4. "Developing Natural Language-based Software Analyses & Tools for Software Maintenance." The College of New Jersey, Fall 2009.
5. "Developing Natural Language-based Software Analyses & Tools for Software Maintenance." Washington & Lee University, Fall 2009.
6. "Exploring the Neighborhood with Dora to Expedite Software Maintenance." Empirical and Applied Software Engineering Lab at the University of Maryland, Baltimore County, Spring 2008.

PROFESSIONAL SERVICE ACTIVITIES

DREW UNIVERSITY

Lead CS Curriculum update, 2014-2015.

STEM Presidential Scholars Working Group, Fall 2014.

LOCAL & REGIONAL

Strategic Action Planning Committee on Curriculum & Instruction, Madison Public Schools, 2015.

North Jersey Regional Science Fair Judge, Spring 2012.

DISCIPLINE

Chair

Tool Demo Track Program Chair, 22nd International Conference on Software Analysis, Evolution and Reengineering (SANER), 2015.

Publication Chair, IEEE International Conference on Software Testing, Verification, and Validation, 2014.

Workshops Co-Chair, IEEE Software Evolution Week: Joint Meeting of the European Conference on Software Maintenance and Reengineering and the Working Conference on Reverse Engineering (CSMR-WCRE), 2014.

Tool Demo Track Program Chair, IEEE International Conference on Program Comprehension, 2013.

Organizer

1st International Workshop on Natural Language Analysis in Software Engineering, 2013.

1st International Workshop on The Next Five Years of Text Analysis in Software Maintenance, 2012.

Workshop on Textual Analysis in Software Engineering, June 2012, September 2012, May 2013.

Program Committee Member

IEEE International Conference on Software Maintenance and Evolution, 2014-2015.

IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER, CSMR, WCRE) 2013-2015.

IEEE International Conference on Program Comprehension, 2012-2015.

IEEE International Conference on Software Engineering, Poster Track, 2014.

IEEE International Conference on Software Maintenance, Tool Demo Track, 2014.

Workshop on Mining Unstructured Data, 2013.

Working Conference on Mining Software Repositories (IEEE/ACM), 2011-2014.

IEEE International Conference on Software Maintenance, Early Research Achievements (ERA) Track, 2013.

IEEE International Working Conference on Source Code Analysis and Manipulation, 2013-2014.

International Conference on Evaluation of Novel Approaches to Software Engineering, 2012.

Workshop on Search-driven Development: Users, Infrastructure, Tools & Evaluation, 2011-2012.

Working Conference on Mining Software Repositories, Mining Challenge, 2009-2011.

Reviewer

Empirical Software Engineering; An International Journal, 2011-2014.

Science of Computer Programming, 2011-2014.

ACM Transactions on Software Engineering and Methodology, 2010-2012, 2014.

IEEE Transactions on Software Engineering, 2009, 2014.

Journal of Systems and Software, 2013.

External Reviewer Workshop on Experiences and Empirical Studies in Software Modeling, 2011.

Webmaster International Symposium on Software Testing and Analysis, 2006.

MONTCLAIR STATE UNIVERSITY

Deputy Chair, Academic Technology Committee. Spring 2013 - Spring 2014.

Organizer, Moderator, & Panelist for Real Women in Science Conference, panel on STEM Careers for Women: Challenges, Mentorship, & Balance, Fall 2011 - Spring 2012.

Participant in Research Academy for University Learning discussion group on *Integration of Abilities: Exercises for Creative Growth*, Fall 2010.

College of Science and Mathematics

CSAM Web Manager Search Committee, Summer 2013.

Department liaison for the CSAM Student Research Symposium, Spring 2011.

Computer Science Department

ABET Course coordinator for CMPT 183: Foundations of Computer Science I, Fall 2013 - Spring 2014.

Louis Stokes Alliance for Minority Participation (LSAMP) coordinator, Fall 2012 - Spring 2014.

CS Faculty Search Committee, 2012-2013.

Lab Hardware Selection Committee, 2013.

Graduate Committee, Summer 2012.

Curriculum development subcommittees, Spring 2012:

Leader, undergraduate research curriculum development committee

Member, CMPT 230 Computer Systems course development committee

Professional Science Masters (PSM) Committee, Fall 2011.

Information Technology (IT) Curriculum and Accreditation Committee, Fall 2011.

Advisor for Computer Science and Information Technology Majors, 2011-2012.

Assessment Committee for CMPT 183: Foundations of Computer Science I, Spring 2011-2012.

Lead department effort to select new introductory textbook for CMPT 183-184 to better meet student needs and address programming inadequacies observed by faculty in upper level classes, 2011.

Grader for Software Engineering section of comprehensive exam for masters students, Fall 2010.

HONORS AND AWARDS

Distinguished Referee 2011-2012, ACM Transactions on Software Engineering and Methodology (TOSEM), 2013.

Certificate of Excellence, Summer Institute for Online Teaching and Learning Professional Development Program, Montclair State University, 2011.

Distinguished Paper Award, International Conference on Automated Software Engineering (ASE), 2010.

Frank Pehrson Award for Outstanding Graduate Student, University of Delaware, 2009.

Graduate Research Fellowship, National Science Foundation, 2005-2008.

Best Paper Award, Working Conference on Mining Software Repositories, 2008.

Lauri Pfeffer Shinn Memorial Award, University of Delaware, 2007.

ACADEMIC MEMBERSHIPS

ACM, IEEE.