

Curriculum Vitae

MAUREEN DOYLE

August, 2012

Associate Professor
Department of Computer Science
Northern Kentucky University
Highland Heights, KY 41099
(859) 572-5468

EDUCATION

Stanford University, Stanford, CA, 1998-2004

Ph.D. in Scientific Computing and Computational Mathematics (SCCM) (2004)

M.S. in Scientific Computing and Computational Mathematics (2001)

Northeastern University, Boston, MA, 1990

M.S. in Mathematics with a concentration in Statistics

University of Lowell, Lowell, MA, 1982

B.S. in Mathematics with a concentration in Computer Science

ACADEMIC EXPERIENCE

2011-Present	Associate Professor of Computer Science , Northern Kentucky University
2006-2011	Assistant Professor of Computer Science , Northern Kentucky University
2003-2006	Assistant Professor of Computer Science , Morehead State University
2001	Teaching Assistant , Stanford University
1983-1985	Instructor , University of Lowell

DISSERTATION

"A Barrier Method for Sparse Nonconvex Optimization Problems" Advisor: Professor Walter Murray

INDUSTRY EXPERIENCE

1994-2003 **Senior Scientist**, BBN Technologies

Managed a research project examining simultaneous collaboration using Quality of Service Objects; Led a team of eight software developers for a distributed mapping product, OpenMap™, responsibilities included defining project objectives, task assignment and management, and product design for multiple clients' requirements; In 1996, awarded a DARPA ISO, JTF Program Manager letter of commendation for teamwork; Designed and developed software for a fielded two-dimensional underwater tracking algorithm and was awarded Project Excellence Awards in 1993 and 1994.

1987-1994 **Software Engineer**, ALPHATECH Inc.

Developed, implemented and evaluated algorithms for tracking large-scale closely-spaced objects; Developed software for Petri-Net modeling tool; Implemented a robust algorithm for epsilon-optimal test scheduling algorithm.

1985-1987 **Software Quality Assurance Engineer**, General Electric Company

Developed and organized Software Quality Assurance department satisfying MIL-STD-2167 (US Government Software Development Standard).

1982-1985 **Reliability Engineer**, Data General Corporation

Developed requirements and designed a software product to automate the reliability prediction process; Researched and developed a method for monitoring multivariate parameters on Statistical Process Control charts.

FELLOWSHIPS

2004 [2004 Project NeXT Fellowⁱ](#)
Exxon-Mobil and Morehead State University.

1998-2000 [Dean's Doctorial Diversity Fellowship Assistantship Awardⁱⁱ](#)
College of Engineering Stanford University, Stanford CA.

AWARDS and HONORS

2012 Center for Applied Informatics Impact Award for advocacy and support of CAI at NKU

2011 NKU Faculty Excellence Award for **Excellent Performance in Teaching**
Northern Kentucky University

2011 Cincy Magazine **Outstanding Educators** Award, Cincy Magazine (www.cincy.com)

2006 **Distinguished Teaching Award**
Department of Mathematics and Computer Science
Morehead State University

2000 **SIAM Student Travel Award** for the Annual SIAM Meeting, Philadelphia PA

2000 **Graduate Service Award**, Stanford University
Nominated for service in peer tutoring project and creation of an organization for adults returning to school (Stanford Returning Students Association).

1991 **Joseph G. Wohl Memorial Award**, ALPHATECH, Inc. Burlington, MA
Annual research paper award for "Tracking Closely-Spaced Objects using Multi-Assignment Algorithms" by Tsaknakis, Washburn, Doyle Buckley.

COURSES TAUGHT

Undergraduate Courses:

Elementary Programming (NKU)	Operating Systems (MSU)
Introduction to Computer Information Technology (NKU)	Data Structures (MSU)
Object Oriented Programming (NKU)	Introduction to Computer Science for CS, Math and Math Education majors (MSU)
Object Oriented Programming Lab (NKU)	Computer Graphics (MSU)
Object Oriented Programming II (NKU)	Concurrent Programming (MSU)
Advanced Data Structures and Algorithms (MSU, NKU)	
Software Engineering (MSU, NKU)	

Graduate Courses:

Advanced Programming Workshop (NKU)	Advanced Software Engineering (NKU)
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CURRICULUM DEVELOPMENT

Course Development:

2012	INF 286, Introduction to Web Development. Updated to HTML5 and taught using an inverted classroom model.
2009	CSC 601, Advanced Programming Workshop. Revamped graduate course to realign with course description of improving students programming understanding, knowledge and expertise.
2008	One year Software Engineering course. At the direction of the department chair, Dr. Gary Newell, led team on which defined a one-year course sequence for Software Engineering.
2007	Software Engineering modified for spring, 2007 to be part of a multidisciplinary project including INF 282, Introduction to Databases (Truta) and Communications course (King, B.).
2006	Elementary Programming (led by M. Truta; with B. Kirby and B. Richardson)
2005	Lab for Introduction to Computer Science (MSU) (with D. Skaggs and R. May)
	Concurrent Programming (MSU)
2004	Computer Graphics (MSU)
	Operating Systems (MSU)

Program Development:

2011	Undergraduate Software Development Certificate, with MSCS committee
2005	Major in Computer Science (MSU) (led task, with D. Skaggs and R. May)
2004	Minor in Computer Science (MSU) (led task, with D. Skaggs and R. May)

Other Curriculum Development:

Chair of Computer Science Curriculum Committee at (MSU) (2003-2006)
Women's Studies Program Advisory Council (MSU) (2005-2006)
Academic Policy and Classroom Impact Team for the Student Wireless Project (MSU) (2004-2005)
Member of Department Curriculum Committee (MSU) (2003-2004)

STUDENT SUPERVISION DUTIES

2012	Advise Brian Leibrach (CS), Josh Newkirk (CS), Josue Guerrero (CIT), Richard Kwong (CS) and Austin (Levi) Rosenbaum (CS) developing an Android security evaluation app.
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- 2011 Advise Antony Ng (CIT), Brian Leibrach (CS), Josh Newkirk (CS) on secure mobile application development.
Advise Katelyn Kappes(Media Informatics) on evaluating Computational Thinking in INF 128.
- 2010 Advise John Murray (CS/CIT) and Justin Brown (CS) (fall) DLX – Applying ASM and Map/Reduce for solving Queens’ Separation Problems
Advise John Murray (CS/CIT), Rob Lenhof (CIT), Andrew Plunkett (CIT), Troy Crosley, (with J. Walden): “Evaluating Web Security in an Open Source World” (2010)
Advise Jen Moore (CIT), Justin Brown (CS) (summer, fall) (with J. Walden) automating PHP test metric collection.
Posters-at-the-Capital: “Mass Spectrometry in Flash: Animations for online tutorials in Analytical Science,” Advised (with H. Bullen) January 28, 2010.
Celebration of Student Research and Creativity Poster Demonstration: Sponsored Troy Crosley, Rob Lenhoff, John Murray, and Andrew Plunkett (with J. Walden)
Celebration of Student Research and Creativity Poster Presentation: Sponsored Kimberly Hatcher and Anthony Haskamp (with H. Bullen)
- 2009 Advise John Murray (CS/CIT), Rob Lenhof (CIT) (with James Walden and Alina Campan): “Evaluating Web Security in an Open Source World” (summer, fall 2009)
Advise Kimberly Hatcher (CS) (with Dr. Heather Bullen) on Chemistry Visualization Applications. (fall 2009)
KAS Meeting, “Mass Spectrometry in Flash: Animations for online tutorials in Analytical Science,” Kimberly Hatcher won 2nd place in Computer and Information Systems section. co-advised with Dr. Heather Bullen
Honors Advisor for Michael Whelan (with James Walden) (spring) “Open Source Security Review”
Celebration of Student Research and Creativity Poster Demonstration: Sponsored Michael Whelan and Grant Welch (with James Walden) for “Open Source Security Review”
Celebration of Student Research and Creativity Poster Presentation: Sponsored (with Jeff Ward) Robert Jeffers for “Queen’s Separation Problem”.
- 2008 Master’s Thesis Committee for Tiffany Emerson (Advisor: Jimmie Manning, May, 2009 graduation). Working thesis title: "Between Flirting & Sexual Harassment: Explaining Efficacy and Effrontery in the Workplace"
Honors Advisor for Michael Whelan (with James Walden) (spring, summer, fall)
Advised (with James Walden) George Muntz (summer) and Grant Welch (summer, fall)
Advised John Miller (spring only) and Robert Jeffers (with Jeff Ward) on Queens Separation work (summer, fall)
Advised (supporting Chris Brewer) Jeremy Henage on GetPixed Project (spring)
Celebration of Student Research and Creativity Interactive Demonstration: Advised Amber Rogers and Bernadina Rawe for “JDLX: A Visualization of Dancing Links”
Celebration of Student Research and Creativity Poster Presentation: Advised (with Jeff Ward) John Miller, Amber Rogers and Luke Thompson for “Solving N+k Queens with Dancing Links”.
- 2007 **Honors Advisor** for Bernadina Rawe and Amber Rogers. (spring, summer, fall)
Advised John Miller and Amber Rogers (with Jeff Ward) on Queens Separation work (fall)
Advised John Miller and Luke Thompson on Queens Separation work. (spring, summer)
Advised Jeremy Henage on Project Work grant. (summer, fall)
- 2005-2006 **Capstone Advisor**. (MSU) 4 students
2004-2005 **Capstone Advisor**. (MSU) 3 students
2003-2004 **Capstone Advisor**. (MSU) 1 student

REFEREED PUBLICATIONS

J. Walden and *M. Doyle*, "SAVI: Static-Analysis Vulnerability Indicator," IEEE Security & Privacy, May-June 2012, Vol 10, Issue 3, pp. 32-39.

R.D. Chatham, *M. Doyle*, **R. Jeffers**, W. A. Kusters, R. D. Skaggs, J. Ward, "Centrosymmetric Solutions of Chessboard Separation Problems," Bulletin of the Institute of Combinatorics and Its Applications, Vol. 65, May 2012.

M. Doyle, B. Buckley, W. Hao and J. Walden, "Work In Progress - Does Maintenance First Improve Student's Understanding And Appreciation Of Clean Code And Documentation," 2011 Frontiers in Education Conference, Rapid City, South Dakota, October 12 - 15, 2011.

M. Doyle and J. Walden, "An Empirical Study of the Evolution of PHP Web Application Security," 7th International Workshop on Security Measurements And Metrics, Banff, Canada, September 21, 2011.

W. Hao, *M. Doyle*, and J. Fu, "Preparing Students for New Programming Paradigms: Integrating a Mobile-Cloud Project into a Software Engineering Course," in SMARTphones in the Curriculum workshop (SMACK 2011), held at the 24th IEEE Conference on Software Engineering Education and Training, Waikiki, Honolulu, Hawaii, May 22, 2011.

J. Walden, *M. Doyle*, R. Lenhofⁱⁱⁱ, J. Murray, A. Plunkett, "Impact of Plugins on the Security of Web Applications," International Workshop on Security Measurements and Metrics (MetriSec 2010), Bolzano-Bozen, Italy, September 15, 2010.

K. Kirby, J. Walden, R. Garns, *M. Doyle*, "The Great Chains of Computing: Informatics at Multiple Scales," Foundations of Information Science (FIS) 2010: Towards a New Science of Information, Beijing, China, August 20-23 2010.

J. Walden, *M. Doyle*, R. Lenhof, J. Murray, "Idea: Java vs. PHP: Security Implications of Language Choice for Web Applications," International Symposium on Engineering Secure Software and Systems (ESSoS) 2010, Pisa, Italy, LNCS 5965, February 2-3 2010, 61-69.

J. Walden, *M. Doyle*, G. Welch, M. Whelan, "Security of Open Source Web Applications," Proceedings of the 2009 3rd International Symposium on Empirical Software Engineering and Measurement, October 2009, 545-553.

M. Doyle, D. Kasturiratna, B. Richardson, S. Soled, "Computer Science and Computer Information Technology Majors Together: Analyzing Factors Impacting Students' Success in Introductory Programming," IEEE-ASEE Frontiers in Education Conference, October, 2009, 190-195.

M. Doyle, B. Rawe, A. Rogers, "JDLX: Visualization of Dancing Links," CCSC-Midwest 2008 Conference 24, October, 2008, 9-15.

R.D. Chatham, *M. Doyle*, J.J. Miller, A.M. Rogers, R.D. Skaggs, J.A. Ward, "Algorithm Performance For Chessboard Separation Problems," Journal of Combinatorial Mathematics and Combinatorial Computing Special Issue, 70, 2009, 127-142.

M. Doyle, K. Kirby, and G. Newell, "Engaging Constructions: Family-Based Computing Experiences for Immigrant Middle School Students" Proceedings of the 39th annual Technical Symposium on Computer Science Education, 40, 1, 2008, 58-62.

M. Doyle, S. Soled, and B. Richardson. "Work in Progress: How Elementary Programming Impacts Student's Attitude in Computer Science," Frontiers in Education 2007, F2J-12-F2J-13.

R.D. Chatham, *M. Doyle*, G.H. Fricke, J. Reitmann, R.D. Skaggs, and M. Wolff, "Independence and domination separation on chessboard graphs," Journal of Combinatorial Mathematics and Combinatorial Computing, 68, 2009, 3-17.

PUBLICATIONS

H. Tsaknakis, *M.D. Buckley*, and R. B. Washburn, "Tracking Closely-Spaced Objects Using Multi-Assignment Algorithms," Tri-Service Data Fusion Symposium, November, 1991.

J.L. Weiss, *M. Doyle-Buckley*, and J.C. Deckert, "A prototype test-engineering workstation for analog electronics" Aerospace and Electronics Conference, Page(s):1937 - 1943 vol.4, May, 1989.

REVIEWER

- 2012 Five papers for Metrisecon 2012.
- 2011 Three Birds-of-A-Feather applications for ACM SIGCSE 2012
Three papers for Metrisecon 2011.
- 2010 Three papers for ACM's Innovation and Technology in Computer Science Education (ITiCSE) 2010
Four CS1 programming applications (CodeLab, Practice It!, LiveLab, and JavaBat) for Addison-Wesley and
Prentice Hall Computer Science.
One paper for the International Conference on Society and Information Technologies (ICSIT) 2010.
One paper for the 2010 CCSC South Western Conference
- 2009 One paper for ACM SIGITE 2009
One paper for the 7th International Conference on Education and Information Systems Applications:
EISTA 2009. (non-blind)
Two papers for 7th ACIS International Conference on Software Engineering Research, Management, and
Applications: SERA 2009
Three papers for the 2009 CCSC South Western Conference.
- 2008 Six workshop papers and one paper for ACM SIGCSE 2009
One paper for the 2008 IEEE/IFIP International Conference on Trust, Security and Privacy for
Pervasive Applications
Two papers for the 2008 ACM Special Interest Group in Information Technology Education Conference
Three papers for the 2008 International Conference on Computer Science Education (ITiCSE)
Three papers for the 2008 Frontiers in Education Conference
Three papers for the 2008 CCSC South Western Conference
- 2007 Six panel submissions for ACM SIGCSE 2008
Book Chapter Nine. Wu's, "A Comprehensive Introduction to Object Oriented Programming" for M.
Weitz
Two papers for the 2007 Consortium for Computer Science in Colleges -Midwest Conference
- 2006 Two papers for the 2007 International Conference on Robotics and Automation (<http://www.icra07.org/>)

INVITED TALKS AND PRESENTATIONS

“Work In Progress - Does Maintenance First Improve Student’s Understanding And Appreciation Of Clean Code And Documentation,” *M. Doyle*, B. Buckley, W. Hao and J. Walden, 2011 Frontiers in Education Conference, Rapid City, South Dakota, October 12 - 15, 2011.

“An Empirical Study of the Evolution of PHP Web Application Security,” *M. Doyle* and J. Walden, 7th International Workshop on Security Measurements And Metrics, Banff, Canada, September 21, 2011.

“Preparing Students for New Programming Paradigms: Integrating a Mobile-Cloud Project into a Software Engineering Course,” W. Hao, *M. Doyle*, and J. Fu, in SMARTphones in the Curriculum workshop (SMACK 2011), held at the 24th IEEE Conference on Software Engineering Education and Training, Waikiki, Honolulu, Hawaii, May 22, 2011.

“Effect of Plugins on Web Application Security,” J. Walden and M. Doyle, 2010 IMI Security Symposium, Erlanger, KY, October 15, 2010.

“Impact of Plugins on the Security of Web Applications,” J. Walden, M. Doyle, R. Lenhof, J. Murray, and A. Plunkett, International Workshop on Security Measurements and Metrics (MetriSec 2010), Bolzano-Bozen, Italy, September 15, 2010.

“The Great Chains of Computing: Informatics at Multiple Scales,” K. Kirby, J. Walden, R. Garns, and M. Doyle, Foundations of Information Science (FIS) 2010: Towards a New Science of Information, Beijing, China, August 20-23 2010.

“Security of Web Application Systems with Plugins,” J. Walden and M. Doyle, Ohio Information Security Forum Four Year Anniversary Event, Dayton, OH, July 10, 2010. <invited>

“Cutting Diagonally Across Multiple Disciplines: Communication in a College of Informatics”, J.G. Raugsdale, J. Manning, S.Weiss, M. Doyle, J. Walden, and T. Sakaguchi, Central States Communication Association 2010 Convention, Cincinnati, OH April 16, 2010.

“Career Choices: Never Settle” lightning presentation at Kentucky Women In Computing (KY WIC), Gilbertsville, KY February, 27, 2010.

“Java vs. PHP: Security Implications of Language Choice for Web Applications,” J. Walden, M. Doyle, R. Lenhof, J. Murray, International Symposium on Engineering Secure Software and Systems (ESSoS), Pisa, Italy, February 3, 2010.

“Computer Science and Computer Information Technology Majors Together: Analyzing Factors Impacting Students’ Success in Introductory Programming,” M.Doyle, D. Kasturirratna, B. Richardson, S. Soled, ASEE/IEEE 39th Frontiers in Education Conference, San Antonio, TX, Oct 19, 2009.

“Security of Open Source Web Applications”, J. Walden, M.Doyle, G.Welch, M. Whelan, Metrisec 2009, Lake Buena Vista, FL, Oct 14, 2009.

“How Secure is your Web App? Open Source PHP Web Applications Security,” M. Doyle, J. Walden, University of Kentucky Computer Science Colloquia, Oct 7, 2009. <invited>

"An Empirical Study of Web Application Security Trends," J. Walden, M. Doyle, Cincinnati OWASP Meeting, Cincinnati OH, Jul 21, 2009. <invited>

"Security of Open Source Web Applications", J. Walden, M. Doyle, G. Welch, M. Whelan, Metricon 3.5, San Francisco, CA April 20, 2009.

"OWASP Source Code Review," J. Walden, M. Doyle, Grant Welch, Michael Whelan, OWASP EU Summit 2008, Algarve, Portugal, November 4-7, 2008. <invited>

"JDLX: A Visualization of Dancing Links," M. Doyle, B. Rawe, A. Rogers, CCSC-Midwest 2008 Conference, Holland, MI 2008.

"Consider Technology," M. Doyle, South Shore Vocational Technical High School IT students, May 22, Weymouth MA 2008.

"Decomposition Schemes for Differential Mathematical Programming Equality Constrained Problems," M. Doyle and U. Shanbhag, SIAM Conference on Optimization, May 9-12, Boston MA 2008.

"Engaging Constructions: Family-Based Computing Experiences for Immigrant Middle School Students," M. Doyle, K. Kirby, and G. Newell, The 39th annual Technical Symposium on Computer Science Education, March 12-15, Portland OR 2008.

"Educational Outreach to Hispanic Immigrants in the Midwest: An Approach through Computing," H. Riffe, B. Kirby, K. Kirby, M. Doyle, Council of Urban and Metropolitan Universities Conference, October 22, 2007.

"Algorithm Performance for Chessboard Separation Problems," M. Doyle, J. Miller, A. Rogers, J. Ward, 21st Midwest Conference on Combinatorics, Cryptography, and Computing, Charleston, SC, October 2007.

"Work in Progress: How Elementary Programming Impacts Student's Attitude in Computer Science," M. Doyle, S. Soled, B. Richardson, Frontiers in Education, 2007, Milwaukee, WI, October, 2007.

"Simply Dancing," M. Doyle, B. Kirby, R. Guriel, H. Riffe, CINSAM Faculty Research Poster Session, Northern Kentucky University, Highland Heights, KY, September 2007.

"Robotics Paving The Way", M. Doyle, Northern Kentucky Rotary Club, Covington, KY, July, 2007.

"A Geometric Appreciation of the Singular Value Decomposition (SVD)", M. Doyle, Discrete Algorithms Seminar, Morehead State University, Morehead, KY, December, 2006. <invited>>

"The Distribution of Attention with moving objects is affected by Spatial Probabilities", Cary S. Fera and M. Doyle, Vision Science Society Conference, Sarasota Bay, FL, May, 2006.

"Moving MELBA to MLBA", Kentucky Academy of Sciences, Richmond, KY, November 2005.

"Project NeXT Experiences", with M. Dobranski and T. O'Brien at Morehead State University MCS Seminar, Morehead, KY, April 2005.

"Faculty-Student Connection Outside of the Classroom", with A. Thompson and N. Gilbert at the Joint Mathematics Meeting, Atlanta, GA, January 2005.

"Barrier Algorithms for Sparse Nonlinear Optimization Problems", Invited Speaker. BBN Science Development Seminar, Cambridge, MA, July 2004. <invited>

"Linear algebra and the desire to effectively search for data in the internet", Kentucky Academy of Sciences, Bowling Green, KY, November, 2003.

"Barrier Algorithms for Sparse Nonlinear Optimization Problems", SIAM 50th Anniversary Conference, Philadelphia, PA. July, 2002.

"Barrier Algorithms for Large, Sparse Nonlinear Optimization Problems", Research, Careers, and Computer Science: A Maryland Symposium, University of Maryland. November, 2001.

GRANTS

- 2012 NKU Project Grant, "Security in applications developed with agile software development processes". \$4400.00 to support travel.
- 2011 Principal Investigator with James Walden and Alina Campan, "Predicting Vulnerabilities in Web Applications using Open Source Repository Data, ". CINSAM grant \$8,141.00
- 2010 **co-Principal Investigator** with TJ Murphy (PI), Bethany Bowling (co-PI), and Heather Bullen (co-PI). "STEP-1A: FORCE: Focus on Occupations, Recruiting, Community, and Engagement", \$999,930 NSF DUE – STEP, NSF Proposal Number 0969280.
- 2009 **co-Principal Investigator** with K. Kirby (PI) and J. Walden(co-PI). "CPATH-1: Informatics at Multiple Scales", \$295,814, NSF IIS – CPATH, NSF Proposal Number 0939103.
- 2008 **co-Principal Investigator** with J. Walden (PI), A. Campan and D. Kasturiratna awarded \$13,173 (student support, student travel, supplies) "Evaluating Web Application Security in an Open Source World".
- Kenton County Partnership Grant to demonstrate to high school students the different options in Informatics. "You are a Movie Director: Programming with Alice".
- co-Principal Investigator** with J. Walden awarded \$2500 (all used for student support), **OWASP Summer Research**, to examine open source projects using Fortify's Open Review process and to develop and evaluate an OWASP/Fortify workflow process.
- 2007 **co-Principal Investigator** with D. Chatham (PI), R. Blankenship, R. Duane Skaggs, all of Morehead State University. Kentucky **NSF EPSCoR Grant** UKRF 3046884400-07-419, "Separation Problems Chessboard Graphs." (\$25000 grant; \$8430 to NKU)
- co-Principal Investigator** with B. Kirby. **NKU CINSAM Outreach Grant**, "Robotics Soccer." (\$1500)
- Principal Investigator. NKU Project Grant**, "Improving the Robustness of Linesearch Barrier Optimization Methods." (\$4900)
- 2005 **Principal Investigator** with D. Chatham, T. O'Brien, and R. Duane Skaggs. **Kentucky NASA EPSCoR Grant** NCC5-571, "A Scaleable Research Cluster: A Teaching Tool in Parallel Computing." (\$25000)
- 2004 **co-Principal Investigator** with R. Duane Skaggs. Morehead State University. Internal funded grant "High Performance Computing Cluster."
- Morehead State University **Teaching and Learning Center grant** to participate in Project NeXT at the Joint Mathematics Meeting, January 2005.

MSU Math and Technology Cadre Leader with D. Ahmadi. Tiered-Mentoring Grant from Kentucky Department of Higher Education. PI Dean Gerald DeMoss.

2001-2003 National Science Foundation Grant CCR 9988204 and Office of Naval Research Grant N00014-96-1-0274

CURRENT ACADEMIC ORGANIZATIONS

Association of Computing Machinery (ACM)
Institute of Electrical and Electronics Engineers (IEEE)
SIGCSE (ACM subgroup for Computer Science Education)
SIGOPT (ACM subgroup for Optimization)
Society for Industrial and Applied Mathematics (SIAM)
Kentucky Academy of Science (KAS)

COMMITTEES and SERVICE WORK

2012-2013 On Sabbatical

Metrisec 2012 Program Committee

2011-2012 MSCS Program Director
Graduate Council
Women in Informatics student club support co-advisor
SOAR Advisor for Robert Greis
COI Strategic Communication Committee
COI Core Knowledge Committee
COI Dean Search Committee

Open Source Security Cubed, co-hosted by CincyIP and the CAI, Steering Committee
Metrisec 2011 Program Committee
TRIWIC, regional Grace Hopper Celebration of Women in Computing organizer
KDE/SREB Informatics Curriculum Development Committee

2010--2011 MSCS Program Director
Graduate Council
Women In Informatics student club support co-advisor
SOAR Advisor for Robert Greis
NKU CPATH INF 128 quantitative evaluation
NKU CPATH CS Curriculum, Computational Thinking module development
COI Dean Search Committee

Open Source Security Cubed, co-hosted by CincyIP and the IMI, Steering Committee
Predict-11 Workshop co-Organizer, with International Symposium on Engineering Secure Software and Systems (ESSoS) 2011
KDE/SREB Informatics Curriculum Development Committee

2009-2010 MSCS Program Director
Graduate Council

Evaluated and recommended Integrated Development Environments for CSC's Java curriculum
SOAR Advisor for CIT major's Robert Greis and Chardonnay Webster
Women In Informatics student club support advisor
CIT review committee
CSC Game Night Coordinator (Fall, Spring game nights) with NKU's student groups: Table Top Club, Informatica and Wii

2nd Annual Open Source and Security Conference, Steering Committee and Technologists Panel coordinator. May 17, 2010

Staffed ACM-W booth at SIGCSE, March 10-13, 2010 in Milwaukee, WI

Security in the CS Curriculum. Birds-of-A-Feather co-organizer, with Blair Taylor, at SIGCSE, March 11, 2010 in Milwaukee, WI

ASEE/IEEE Frontiers in Engineering Panel Chair, October 2009

2008-2009 CINSAM director search committee

Coordinating installation, running and evaluation of CSC440 student-built college kiosk

University Benefits (member of Sabbatical subcommittee)

Department Scholarship and Awards

Software Engineering course revamp working group

Women In Informatics student club advisor

Contact person for instructors of INF 260, fall semester

Contact person for instructors of CIT 140, fall semester

ACM SIGCSE Panel Chair, March 2009.

2007-2008 Computer Science department getPixelated point of contact

University Benefits (member of Sabbatical subcommittee)

Department Scholarship and Awards

Department search for three tenure track faculty

Women In Informatics student club advisor

CSC informal student group club advisor

Department SACs assessment

CSC Game Night Coordinator (Fall, Spring game nights)

2006-2007 University Benefits (member of Sabbatical subcommittee)

Department Scholarship and Awards

Department Geographic Information Systems (GIS) candidate search

CSC Game Night Coordinator

Logistics coordinator and advertiser for security presentation by Dr. Gary McGraw

QEP Workshop Presenter

Student advising for spring, 2007

2005-2006 MCS Chair Search (MSU)

College Recruitment and Retention (MSU)

Developed Computer Science evaluation criteria and summarized accomplishments as part of the department's University review cycle.

2004-2005 Department Recruitment and Retention (MSU)

College Recruitment and Retention (MSU)

Worked on a team with Dr. Adam Kantrovich and led by Dr. Ahmad Zargari and wrote the College of Science and Technology's Advanced Technology Plan submitted April, 2005. This plan incorporates visions, comments and suggestions from MSU faculty and staff regarding CS&T.

2003-2004 Department Curriculum (MSU)
Department Planning and Evaluation (MSU)

OUTREACH

2012-2013 NKU STEM FORCE "STEM Ambassador" Computer Science coordinator.

Mentor for Holmes High School female student, Ashley Jackson.

Mentor for NKU SOAR Scholar for CIT majors Robbie Greis

TRIWIC Regional Grace Hopper Conference coordinator for Fall, 2013 conference

2011-2012 Miami-NKU-UC Girls on the Go Mobile App Dev Camp for High School Girls coordinator

NKU STEM FORCE "STEM Ambassador" coordinator.

Mentor for Holmes High School female student, Ashley Jackson.

Mentor for NKU SOAR Scholar for CIT majors Robbie Greis

NCWIT Academic Alliance Representative

Southern Regional Education Board's Preparation for Tomorrow Phase I Team volunteer tasked with developing intellectually demanding career/technical high school informatics courses following curriculum guidelines from "High Schools that Work"

TRIWIC Regional Grace Hopper Conference coordinator for fall, 2011 conference

2010-2011 NKU STEM FORCE "STEM Ambassador" coordinator.

Mentor for Holmes High School female student, Ashley Jackson.

Mentor for NKU SOAR Scholar for CIT majors Robbie Greis.

co-Coach for two teams participating in the ACM Programming Competition (with A. Campan and M. Truta), to be held fall, 2010 at University of Kentucky.

Cincinnati State College Software Engineering Advisory Committee, 2010-2011

NCWIT Cincinnati Regional Aspiration Awards Committee, fall 2010

Southern Regional Education Board's Preparation for Tomorrow Phase I Team volunteer tasked with developing intellectually demanding career/technical high school informatics courses following curriculum guidelines from "High Schools that Work"

TRIWIC Regional Grace Hopper Conference coordinator for Fall, 2011 conference

2009-2010 Mentor for Holmes High School student, Ashley Johnson.

Mentor for NKU SOAR Scholar for CIT majors Chardonnay Webster and Robbie Greis.

Began training to organize and lead a regional Grace Hopper Conference at General Butler State Park (it will be called TRI-WIC) to be held in 2011-2012.

Judge of research and non-research for undergraduate and graduate posters at Kentucky Celebration of Women in Computing (KY WIC) at Kentucky Dam Village State Park, Gilbertsville, Kentucky held February 26-27, 2010.

“Career Choices: Never Settle” lightning presentation at KY WIC, February 27, 2010 in Gilbertsville, KY.

co-Coach for three teams participating in the ACM Programming Competition (with A. Campan), held October 24, 2009 at University of Kentucky. Wei Hao replaced me for the competition weekend due to an illness in my family.

Staffed a booth to promote Women in Informatics, with students from Women In Informatics, at The KY Girls STEM Collaborative Northern Kentucky Forum. November 10, 2010 in Highland Heights, KY.

2008-2009 co-Coach for two teams participating in the ACM Programming Competition (with A. Campan), to be held November 1, 2008 at University of Kentucky.

Mentor for Holmes High School female student, Lydia Berger. Met weekly.

Volunteer for Northern Kentucky Girls in Science, a NKU program supported by CINSAM, to introduce 6th grade girls to women scientists (<http://www.nku.edu/~bowlingb2/NKGIS.htm>).

“Consider Technology” presentation at South Shore Vocational Technical High School Weymouth MA

2007-2008 Volunteer Timekeeper for CINSAM’s First Lego League, January 2008.

co-Coach for 2 teams participating in the ACM Programming Competition (with M. Truta), held November, 2007 at University of Kentucky (UK).

Build It, Trust It, Use It. Researcher on Broadening Participation in Computing Grant working with Hispanic families at el Centro de Amistad.

2006-2007 Robotics Soccer. Worked with Bo Kirby and Turkeyfoot High School teacher, Rita Guriel. We presented a summer series working with robots for four middle-school aged Hispanic girls from el Centro de Amistad. Funding provided by CINSAM and CSC department.

co-Coach for 2 teams participating in the ACM Programming Competition (with M. Truta), held November, 2006 at University of Kentucky (UK).

Volunteer Timekeeper for CINSAM’s First Lego League, December 2006.

Attended, and met with coordinators, of University of Cincinnati’s Bearcats BEST, a high school robotics competition, October 2006.

2005-2006 Math and Computer Science Club co-chair (with M. Dobranski)

Coached 2 teams for the ACM Programming Competition held November, 2005 at UK.

Coordinated 20 minute activity for teams of regional High School students as part of Mathematics, Physics, and Technology Exploration (MPATE) day held November, 2005.

Presented a thirty-minute presentation, and held follow-up question/answer session, about the field of computer science and economic advantages of attending college to three high schools (Rowan County High School, Paul G. Blazer High School, and Breathitt County Area Technology Center).

2004-2005 Coached 2 teams for the ACM Programming Competition held November, 2004 at UK.

Led one-day mathematics activity for Upward Bound monthly meeting December, 2004.

Developed and coordinated 20 minute activity for teams of regional High School students as part of Mathematics, Physics, and Technology Exploration (MPATE) day held November, 2004.

2003-2004 Developed and coordinated 20 minute activity for teams of regional High School students as part of Mathematics, Physics, and Technology Exploration (MPATE) day held November, 2003.

Judged student Computer Science presentations at the Kentucky Academy of Science conference, November 2003.

ⁱ as assistant professor at Morehead State University (blue)

ⁱⁱ as graduate student at Stanford University (cardinal)

ⁱⁱⁱ undergraduate student