

CURRICULUM VITAE
Megan Squire

Campus Box 2320
Department of Computing Sciences
Elon University
Elon, NC 27244
(336) 278-5204
msquire@elon.edu

EDUCATION

Ph.D., Nova Southeastern University (2003). Computer Science.

Dissertation: *Discovering Interesting Rules Using A Parallel, Multi-Criteria Knowledge Discovery System*

M.S., Nova Southeastern University (2000). Computer Science.

B.A., College of William and Mary (1994). Art History, Public Policy. High Honors.

ACADEMIC APPOINTMENTS

Current

Associate Professor. Department of Computing Sciences, Elon University, 2002-Present.

Previous

Adjunct Instructor. Department of Computer Science, North Carolina State University, 2002.

Adjunct Instructor. Business Division, North Carolina Wesleyan College, 2000-2002.

TEACHING

Philosophy

I use a variety of methods in my teaching practice in order to promote student learning through meaningful engagement. When I am teaching a course with a significant skills mastery component, such as database design or software development, I most frequently use a laboratory-based cognitive apprenticeships. In my experience, students benefit from the way the apprenticeship method introduces problem-solving skills by focusing first on observing the professor as she describes and models the skill, and then by several iterations of corrective feedback in a setting requiring creative application of the skill.

Courses Recently Taught at Elon University (within the past 3 years)

CSC 111 / ISC 111 Data Science and Visualization

CSC 130 Introduction to Computer Science (CS1)

ISC 301 Database Management

ISC 310 Human Computer Interaction

ISC 320 Data Mining

ISC 325 Data-Driven Web Development

ISC 499 Undergraduate Research

GST 364 Technology and Society Seminar

RESEARCH

Statement

My main research interest is in the area of large database systems, especially data collection, aggregation, mining, and reporting. Currently, I lead a project called FLOSSmole; we are a team of software developers who write programs to gather and analyze data about free, libre, and open source software projects, and then freely provide the results back to the research community.

This has been an interesting and rewarding project because the results are so practical and readily applicable to research in a variety of fields, including both software engineering and data mining. *Note, older articles are as published under 'Conklin', my former surname.*

Journal Articles and Book Chapters

Heinrichs, L., Hutchings, D., Kleckner, M., Squire, M. (2011). Charting a new curriculum for a data-driven world. *Issues in Information Systems*, XII(2). 256-263.

Gonzalez-Barahona, J., Izquierdo-Cortazar, D., Squire, M. (2010). Repositories with public data about software development. *International Journal of Open Source Software and Processes* 2(2). April-June 2010. 1-13.

Squire, M. (2009). Integrating projects from multiple open source code forges. *International Journal of Open Source Software and Processes*, 1(1). January-March 2009. 46-57.

Rosinski, P. and Squire, M. (2009). Strange bedfellows: Human-computer interaction, interface design, and composition pedagogy. *Computers and Composition*, 26 (3). September 2009. 149-163.

Conklin, M. (2007). Motives and Methods for Quantitative FLOSS Research. In *Handbook of Research on Open Source Software: Technological, Economic, and Social Perspectives*. (K. St. Amant and B. Still, Eds.) Idea Group Publishing. Chapter XXII. 282-293.

Howison, J., Conklin, M., Crowston, K. (2006). FLOSSmole: A collaborative repository for FLOSS research data and analyses. *International Journal of Information Technology and Web Engineering*, 1(3). July-Sept., 2006. 17-26.

Conklin, M. and Heinrichs, L. (2005). In search of the right database text. *Journal for Computing Sciences in Colleges*, 21(2). December, 2005. 305-312.

Conference Publications (Refereed)

Squire, M. and Williams, D. (2012). Describing the software forge ecosystem. *45th Hawaii International Conference on System Sciences*. Maui, Hawaii. January 4-7. 3416-3425.

Kozak, C. and Squire, M. (2011). A secondary data archive for code-level Debian metrics. *2nd International Workshop on Replication in Empirical Software Engineering Research (RESER 2011)*. Alberta, Canada. September 21. 4-13.

Squire, M. and Duvall, S. (2009). Using FLOSS project metadata in the undergraduate classroom. In *Proceedings of the 5th International Conference on Open Source Systems*. Skovde, Sweden. June 3-6. 330-339.

Conklin, M. (2007). Integrating projects from multiple open source code forges. In *Proceedings of the Workshop on Mining Multiple Information Sources at the 13th International Conference on Knowledge Discovery and Data Mining (MMIS2007 at KDD2007)*. San Jose, CA. August 12, 2007. 51-56.

Conklin, M. (2007). Project entity matching across FLOSS repositories. In *Proceedings of the 3rd International Conference on Open Source Systems*. Limerick, Ireland. June 11-14, 2007. 45-57.

Conklin, M. (2006). Beyond low-hanging fruit: Seeking the next generation in FLOSS data mining. In *Proceedings of the 2nd International Conference on Open Source Systems*. Como, Italy. June 8-10, 2006. 47-57.

Conklin, M. and Heinrichs, L. (2006). Relevancy vs reasonableness: Selecting a senior assessment for a small CIS program. In *Proceedings of the 37th Annual Conference of the Decision Sciences Institute Southwest*. 181-190.

Howison, J., Conklin, M., Crowston, K. (2005). OSSmole: A Collaborative Repository for FLOSS Research Data and Analyses. In *Proceedings of the First International Conference on Open Source Systems*. Genova, Italy. July 10-15, 2005. 54-59.

Conklin, M., Howison, J., and Crowston, K. (2005). Collaboration Using OSSmole: A repository of FLOSS data and analyses. In *Proceedings of the Workshop on Mining Software Repositories at the 27th International Conference on Software Engineering (MSR2005 at ICSE2005)*. St. Louis, Missouri, USA. May 17, 2005. 1-5.

Conklin, M. (2005). Teaching IT hardware concepts using computer forensics as a motivator. *ACM SigITE Newsletter*,2(1). Spring 2005. 4 pages.

Conklin, M., Heinrichs, L., and Kleckner, M. (2004). When Should Students Take the Database Course? One Institution's Assessment. In *Proceedings of the 35th Annual Conference of the Decision Sciences Institute Southwest*. 68-173.

Software Products

Co-Founder and Project Co-Leader. FLOSSmole - an open-source data repository. <http://flossmole.org>

External Grants

Pending. NSF #12-05587. \$322,687. *Collaborative Research: RUI: CRI: CI-ADDO-EN: A Data Sharing Infrastructure for the Open Source Research Community.*

Pending. NSF #12-28788. \$496,805. *RCN: Free and Open Source Software Research Coordination Network (FOSS-RCN).*

2007-2010. Principal Investigator on NSF CRI Grant #07-08767, \$116,000 for *Data and Analysis Archive for Research on Free and Open Source Software and its Development.*

2009. Computing Community Consortium (CRA) grant, \$86,500 for *Developing a Research Vision for F/OSS*. PI is Walt Scacchi (U. of California, Irvine). Other Lead Investigators: Kevin Crowston (Syracuse U.) and Greg Madey (U. Notre Dame). <http://cra.org/ccc/foss.php>

2009. Game Designer and Author on Reacting to the Past mini-grant, \$2,000 for *Rage Against the Machine: Technology, Rebellion, and the Industrial Revolution.*

2007. Co-Investigator on Teragrid Grant Allocation #ASC080007, 5TB storage for *Data*

and workflow repository for studying free and open source software and its development.

Internal Grants and Awards

Elon University Senior Faculty Research Fellowship. 2012-2014.
 Elon University Faculty Research & Development sabbatical. Spring 2011.
 Elon University Faculty Research & Development summer research funding. 2010, 2012.
 Elon University Undergraduate Research Program SURE mentor. 2009.
 Elon College, College of Arts & Sciences Faculty Research Excellence Award. 2008.
 Center for the Advancement of Teaching and Learning (CATL) Scholars Program, Elon University. 2006-2008.
 ATACC Technology Grant, Elon University. 2007. With A. Crider and T. Lee.
 Periclean Scholars Program Grant, Elon University. 2004.
 Pedagogy and Program Enhancement Grant, Elon University. 2004.
 Love School of Business Summer Research Grants, Elon University. 2004, 2005.
 Service-Learning Faculty Scholars Program Grant, Elon University. 2004.
 Critical Thinking Course Enhancement Grant, Elon University. 2004. With M. Kleckner.

PROFESSIONAL ACTIVITIES

Professional Service

Editorial Review Board. International Journal of Open Source Software and Processes. 2008-2012.
Guest Editor. International Journal of Open Source Software and Processes. 2010.
Co-Chair. Workshop on Public Data about Software Development 2006-2010.
Program Committee. Conference on Politics of Open Source, 2010.
Program Committee. International Conference on Open Source Systems. 2006, 2009.
 Publicity Chair 2010.
Program Committee. International Workshop on Replication in Empirical Software Engineering Research (RESER) 2010, 2011.
Program Committee. International Conference on Signal-Image Technology and Internet Systems (SITIS). 2008, 2009.
Program Committee. Workshop on Emerging Trends in FLOSS Research and Development at ICSE. 2007, 2009.
Reviewer. Journal of Information Technology & Politics, 2010-2011.
Reviewer. Data and Knowledge Engineering Journal. 2007, 2009.
Reviewer. ACM-Southeast Conference. 2007.
Reviewer. Journal of Database Management. 2006.

Other Professional Presentations & Publications

Squire, M. (2011). Rage Against the Machine. Workshop with faculty at *Reacting to the Past Annual Summer Institute*. Barnard College, New York, NY, USA. June 10-11, 2011.

Crider, A. and Squire, M. (2011). Reacting to the Past: The Pluto Debate. Featured Session at AAC&U/PKAL Network for Academic Renewal Conference: *Engaged STEM Learning: From Promising to Pervasive Practices*. Miami, FL USA. March 25, 2011.

Scacchi, W., Crowston, K., Jensen, C., Madey, G., Squire, M., et al., (2010). Towards a Science of Open Source Systems, Final Report, Institute for Software Research, University of California, Irvine, Fall 2010.

Squire, M., Gonzalez-Barahona, J., Madey, G. (2010). The present and future of FLOSS

- data archives. At *6th International IFIP WG 2.13 Conference on Open Source Systems (OSS2010)*. Notre Dame, IN, USA. 30 May-1 June.
- Scacchi, W., Crowston, K., Madey, G., Squire, M. (2010). The FOSS 2010 Community Report. At *6th International IFIP WG 2.13 Conference on Open Source Systems (OSS2010)*. Notre Dame, IN, USA. 30 May-1 June.
- Scacchi, W., Crowston, K., Madey, G., Squire, M. (2010). The Future of Research on Free/Open Source Software. Workshop Co-Convener. University of California, Irvine. 10-12 February. CCC/CRA funded workshop.
- Scacchi, W., Crowston, K., Madey, G., Squire, M. (2009). Envisioning National and International Research on the Multi-Disciplinary Study of Free/Open Source Software, Spring 2009.
- Warman, J., Schwind, J., Gordon, B., Squire, M. (2008). The general studies interdisciplinary seminar as a capstone for general education. At *48th Annual National Conference of the Association for General and Liberal Studies: "Wholeness" in General and Liberal Education*. Asheville, NC. 25 September.
- Squire, M., Crider, A., Felten, P. (2008). Assessment of student learning in Reacting to the Past role-playing games. At *International Society for the Scholarship of Teaching and Learning (ISSOTL2009)*, Edmonton, Alberta, CA. 16-19 October.
- Crider, A and M. Squire (2008). Science education within the virtual world of Second Life. At *International Society for the Scholarship of Teaching and Learning (ISSOTL2009)*, Edmonton, Alberta, CA. 16-19 October.
- Squire, M. (2008). FLOSSmole: A collaborative research infrastructure for studying open source software development. Invited presentation for *Profiling Communities Expert Workshop* hosted by OSS Watch. Oxford, UK, 21 July.
- Howison, J., Squire, M., Crowston, K. (2008). Towards a data and workflow collaboratory for research on Free and Open Source Software and its development. Poster at the *iConference*, Los Angeles, CA, 27-29 February.
- Squire, M. and A. Crider. (2008). Reacting to the Past: Role playing and learning in the college classroom. At *2008 Lilly Conference on College and University Teaching*. Greensboro, NC, USA. 8 February.
- Howison, J., Squire, M., Crowston, K. (2007). A proposed data and analysis archive for research on Free and Open Source Software and its development. Poster at the *eSocial Science Conference*, Ann Arbor, MI, 7-9 October.
- Conklin, M. and A. Crider. (2007). Educational Opportunities in the Virtual World of Second Life. At *Teaching for Transformation*. Elon, NC. August 16.
- Conklin, M. and A. Crider. (2007). Second Life as a Medium for Learning. At *Center for Creative Leadership Colloquium*. Greensboro, NC. May 31.
- Conklin, M. and A. Crider. (2006). Games as a medium for learning. At *Innovations in*

Instruction. Elon, NC. August 17.

Conklin, M. (2005). 101 Uses for Second Life in the College Classroom. *Games, Learning and Society*. Madison, WI, USA. 28-30 June.

Conklin, M. (2004). Do the Rich Get Richer? The Impact of Power Laws on Open Source Software Development. *Open Source Convention*, Portland, OR. July 28.

Conklin, M. (2004). Weblogs (blogs) for faculty and students. At *Innovations in Instruction*. Elon, NC. August 2, 2004.

Conklin, M. (2004). Lemons Into Lemonade: Spam as a Teaching Tool. Poster. *ACM SIGCSE International Conference 2004*. Norfolk, VA, USA. 3-5 March.

Conklin, M. (2003). Data mining spam. *2003 Regional Conference for the MidSouthEast Chapter of the Association for Computing Machinery*. November, 2003.

UNIVERSITY ACTIVITIES

Elon University Service

Member. QEP (“Writing”) Planning Committee. 2012.

Member. Quality Enhancement Plan (QEP) topic team (“Information Literacy”). 2011.

Member. Voices of Discovery Speaker Committee. 2010-2011.

Member. College of Arts & Sciences Dean Search Committee. 2009-2010.

Member. Greek Housing Committee. 2010.

Member. Student Life Committee. 2009-2011.

Member. Ward Learning in Action Grant Committee. 2008-2010.

Faculty Advisor. Association for Computing Machinery Student Chapter, 2003-2009.

Acting Assistant Director. Center for the Advancement of Teaching and Learning. 2007-2008.

Member. Committee for online evaluation of teaching, 2007-2008.

Web Developer. School of Education Assessment Project. 2005-present.

Member. CATL-IDD Teaching and Learning Conference Committee, 2007.

Member. Faculty Research and Development Committee, 2005-2007.

Member. Elon Academy Curriculum Committee, 2006.

Advisor. Elon 101, 2005, 2006, 2009.

Faculty Advisor. Alpha Chi Omega, 2002-2005.

PROFESSIONAL EXPERIENCE

Plurimus Corporation. Data Mining Research Analyst. 2000-2001. RTP, NC.

Designed and implemented data mining algorithms for mining web usage patterns. Implemented neural networks for use in classification and prediction. Implemented clustering software for customer segmentation and campaign response modeling. Designed and implemented in Java customer reporting systems for Oracle backend, expanded to use OLAP.

Interpath Communications. Sr. Software Architect. 1999-2000. RTP, NC.

Designed automatic system for provisioning and maintaining hosted n-tier e-commerce sites. Designed data model, analyzed third-party products and prepared them to fit in with e-commerce environment, including: credit card processing, EDI, ad servers, automated payments, clickstream analysis.

Verio, Web Hosting Division (formerly Hiway Technologies). Software Developer. 1998-1999. Boca Raton, FL.

E-commerce team. Responsible for design, implementation, and maintenance of all e-commerce applications. Integrated third-party vendor products into automated provisioning system. Designed data models and application front-ends and automated installers for Unix programs. Windows server team leader.

Command Software Systems, Inc. Web Application Developer. 1996-1998. Jupiter, FL.

Software development and system administration for corporate web site. Extended site to handle e-commerce. Automated software downloads for registered users.

International Fine Arts Expositions. Database Marketing. 1995-1996. Stuart, FL.

Developed and maintained marketing database of 10,000 contemporary artists and art galleries. Developed database to hold results of demographic research into target customer market. Designed marketing materials and promotions. Administered local area network.