

# Sarah M. Diesburg

311 Innovative Teaching and Technology Center  
Department of Computer Science  
University of Northern Iowa  
Cedar Falls, IA 50614-0507

Work phone: (319) 273-7395  
Email: diesburg@cs.uni.edu  
Website: <http://www.cs.uni.edu/~diesburg>

---

Updated: June 30, 2017

## Biographical Information

### EDUCATIONAL BACKGROUND

*Ph.D.* Computer Science, Florida State University (FSU), December 2012, GPA: 4.0/4.0

*M.S.* Information Security, FSU, August 2008, GPA: 4.0/4.0

*B.S. magna cum laude*, Computer Science, University of Northern Iowa (UNI), December 2004, GPA 3.6/4.0

### ACADEMIC POSITIONS

*Assistant Professor*, Department of Computer Science, UNI, 2013-present

*Postdoctoral Researcher*, Department of Computer Science, FSU, 2013

*Lead Lecturer*, Department of Computer Science, FSU, 2008, 2011, 2013

*Assistant Lecturer*, Department of Computer Science, FSU, 2012

*Research Assistant*, Department of Computer Science, FSU, 2005-2012

*Teaching Assistant*, Department of Computer Science, FSU, 2007, 2010

*Undergraduate Research Assistant*, Department of Computer Science, UNI, 2003-2004

### OTHER PROFESSIONAL POSITIONS

*Information Security Auditor*, Independent Consultant, 2008

*Part-time Web Developer*, Dyton Creative, 2002-2003

## Invited Book Chapters

2017 Diesburg S. Networks and Distributed Systems. In Galvin PB, Gagne G, & Silberschatz A. *Operating Systems Concepts (10<sup>th</sup> Ed.)*. John Wiley & Sons, July 2017. **In press.**

## Peer-Reviewed Publications

- 2017 Diesburg S, Fienup M. Using GPUs to Forensically Recover Non-Addressable Data on Hardware-FTL-Backed NAND Storage. *The 23<sup>rd</sup> International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA '17)*, July 2017 (4 pages, 28% acceptance rate).
- 2016 Diesburg S, Feldhaus CA, Al Fardan, M, Schlicht J, Ploof N. Is Your Data Gone? Measuring User Perceptions of Deletion. *The 6<sup>th</sup> International Workshop on Socio-Technical Aspects of Security and Trust (STAST)*, December 2016 (12 pages). Supersedes [arXiv:1512.08986 \[cs\]](https://arxiv.org/abs/1512.08986). **In press.**
- Diesburg S, Meyers C, Stanovich M, Wang AIA, Kuenning G. TrueErase: Leveraging an Auxiliary Data Path for Per-file Secure Deletion. *ACM Transactions on Storage* 12, 4 (May 2016), 18:1-18:37. DOI:<https://doi.org/10.1145/2854882> (38 pages).
- 2012 Diesburg S, Meyers C, Stanovich M, Mitchell M, Marshall J, Gould J, Wang AIA, Kuenning G. TrueErase: Per-File Secure Deletion for the Storage Data Path. *Proceedings of the 2012 ACM Annual Computer Security Applications Conference (ACSAC)*, 2012 (10 pages, 19% acceptance rate). Supersedes Technical Report TR-111020, Department of Computer Science, FSU, 2011.
- 2010 Diesburg S, Wang AIA. A Survey of Confidential Data Storage and Deletion Methods. *ACM Computing Surveys*, 43(1): Article 2, 2010, 37 pages.
- 2009 Diesburg, S., Meyers, C., & Wang, AIA. Full-datapath Secure Deletion (Work-in-progress Report). On-line *Proceedings of the 18th USENIX Security Symposium*.
- 2008 Diesburg S, Meyers C, Lary D, Wang AIA. When Cryptography Meets Storage. *Proceedings of the 4th ACM International Workshop on Storage Security and Survivability*, 2008 (10 pages, 62% acceptance rate).
- 2005 Diesburg S, Gray P, Joiner D. High Performance Computing Environments without the Fuss: The Bootable Cluster CD. *Proceedings of the 19th IEEE International Parallel and Distributed Processing Symposium (IPDPS)*, 252.1, April 2005 (8 pages, 33.5% acceptance rate).
- 2004 Gray P, Miller (Diesburg) S. In Search of Clusters for High Performance Computing Education. *Proceedings of the Linux Clusters Institute Conference*, 2004.

Gray P, Miller (Diesburg) S. The Bootable Cluster CD for High Performance Computing Education. *Proceedings of the Midwest Instruction and Computing Symposium*, 2004.

## Other Publications

- 2016 Diesburg S. Ghosts of Deletions Past: New Secure Deletion Challenges and Solutions. *arXiv: 1611.04216 [cs]*. (Nov. 2016).
- 2015 Diesburg, S., Feldhaus, C. A., . Is Your Data Gone? Comparing Perceived Effectiveness of Thumb Drive Deletion Methods to Actual Effectiveness. *arXiv:1512.08986 [cs]*. (Dec. 2015).
- 2012 Diesburg S. Per-File, Full-Data-Path Secure Deletion for Electronic Storage. Ph.D. Dissertation at Florida State University, October 2012, 133 pages.
- 2011 Diesburg, S., Meyers, C., Stanovich, M., Mitchell, M., Marshall, J., Gould, J., Wang, A. A., and Kuenning, G. TrueErase: Full-storage-data-path Per-file Secure Deletion (Technical Report TR-111020). Department of Computer Science: Florida State University.
- 2004 Diesburg S. Monitoring Network Sludge: Using Intrusion Detection to Monitor Network Traffic. Senior Thesis, University of Northern Iowa, 2004.

## Peer-Reviewed Presentations

- 2016 Feldhaus CA, Diesburg S. Motion Virtual Manipulatives and Elementary School Mathematics. Presentation at *The Rural Education National Forum*, Columbus, Ohio, October 2016 (37% acceptance rate).
- Feldhaus CA, Diesburg S. Using Motion Virtual Manipulatives to Teach Elementary School Mathematics. Presentation at *The Twentieth Annual Conference of the Association of Mathematics Teacher Educators*, January 2016 (50% acceptance rate).

## Invited Presentations

- 2016 Diesburg S. Ghosts of Deletions Past: New Research and Challenges in Securely Deleting Your Data, keynote presentation, *49<sup>th</sup> Annual Midwest Instruction and Computing Symposium (MICS)*, April 2016.
- Feldhaus CA, Diesburg S. Motion Virtual Manipulatives and Elementary School Mathematics. Presentation at *The Iowa Association of Mathematics Teacher Educators Conference*, March 2016.
- 2015 Diesburg S. Challenges and New Research in Secure Deletion of Files, UNI Department of Biology Lecture Series, November 2015.
- 2014 Diesburg S. Ghosts of Past Data: Challenges and Advances in Secure Deletion of Files, UNI Graduate College Brown Bag Lecture Series, May 2014.
- Diesburg S. When Delete Means Delete: Secure Deletion of Files on Electronic Media, Invited Talk for the *2014 ACM University of Iowa Computing Conference*, March 2014.
- 2013 Diesburg S. Secure Deletion of Files in the Operating System Storage Data Path, Seminar, UNI, February 2013.
- 2012 Diesburg S. Per-file Full-data-path Secure Deletion for Electronic Storage, FSU Operating Systems Guest Lecture, October 2012.
- Diesburg S. TrueErase: Secure Deletion on Flash Storage, FSU Advanced Operating Systems Guest Lecture, January 2012.
- 2009 Diesburg S. TrueErase: Secure Deletion on Flash Storage. Presented at the *Feed Your Brain Symposium at the FSU College of Communication and Information*, November 2009.
- Diesburg S. TrueErase: Secure Deletion on Electronic Media, FSU Board of Trustees, August 2009.
- Diesburg S. Full-Datapath Secure Data Deletion, Invited Talk, UNI, May 2009.
- Diesburg S. Full-Datapath Secure Data Deletion, *FSU ACM Student Research Conference*, April 2009.
- Diesburg S. Security Technologies, Invited Talk, Department of Criminology, FSU, April 2009.
- 2007 Diesburg S. Organizing a Computing Mentorship for Middle School Students: What Did I Get Myself Into? In *Students & Technology in Academia, Research & Service Summer Workshop 2007*, August 2007.

## Posters

- 2016 Oswald C (student), Brown B (student), Diesburg S (advisor), Feldhaus CA (advisor). Motion Virtual Manipulatives: Emerging Technology for the Elementary Math Classroom. *UNI Summer Undergraduate Research Symposium*, July 2016.
- 2015 Boudreau C (student), Oswald C (student), Diesburg S (advisor), Feldhaus CA (advisor). Design and Evaluation of Motion Virtual Manipulatives in Elementary Mathematics. *UNI Summer Undergraduate Research Symposium*, July 2015.
- 2014 Diesburg S. User Deletion Practices on Sold and Traded Thumb Drives. *UNI Pre-Tenure Summer Fellowship Poster Symposium*, October 2014.
- Mojtaba Al Fardan (student) and Dr. Sarah M. Diesburg (advisor). Analysis of Deletion Habits on Used USB Thumb Drives. *UNI Summer Undergraduate Research Symposium*, August 2014.
- 2010 Diesburg S, Meyers C, Wang AIA. Full-Datapath Per-file Secure Deletion. *2010 Grace Hopper Celebration*, General Poster Session, September 2010.

- 2008 Norena K, Fontaine S, Small M, Johnson A, Achury M, Diesburg S. CCN on the Road. *STARS Summer Workshop*, August 2008.
- 2007 Diesburg S. Organizing a Computing Mentorship for Middle School Students. *STARS Summer Workshop, August 2007*. (2nd place in the retention category)
- 2006 Birch J, Diesburg S, Latislaw C, Miller A, Wynn S. Florida State University's Bridging with Big Bend Gifted Students. *STARS Summer Workshop*, August 2006.
- 2004 Gray P, Joiner D, Diesburg S. The Bootable Cluster CD. *Oklahoma Supercomputing Symposium*, October 2004.

## Honors and Awards

- 2016 Iowa Women of Innovation **Overall Winner** in the Academic Innovation and Leadership category, *Technology Association of Iowa (TIA)*, November 2016.  
 Summer Undergraduate Research Program (SURP) Award (2), UNI CHAS, May 23—July 29 2016. (\$6,000)  
 Recognized as a faculty member going above and beyond in providing academic accommodations, UNI Office of Student Disability Services. (April 2016)  
 UNI Center for Educational Transformation (CET) Research Fellow, 2016-2017. Title: Motion virtual manipulatives in the elementary math classroom. Award start: April 2016. (Amount \$41,910)
- 2015 Iowa Women of Innovation Finalist in the Academic Innovation and Leadership category, Technology Association of Iowa (TIA), November 2015.  
 Summer Undergraduate Research Program (SURP) Award, UNI CHAS, May 26—July 31 2015. (\$3,000)  
 Award Winner, *NCWIT EngageCSEdu Engagement Excellence Award*. March 2015. (\$5,000)  
 UNI Center for Educational Transformation (CET) Research Fellow, 2015-2016. Title: Motion virtual manipulatives in the elementary math classroom. Award start: April 2015. (\$26,000)  
 Nomination, Dean's Award for Teaching Excellence in Departmental Programs, March 2015.  
 CRA-W Early Career Mentoring Workshop scholarship. *ACM SIGCSE '15*. March 2015. (\$1000)  
 UNI 2014-15 Capacity Building Grant Competition Project Award. Title: Motion virtual manipulatives in the elementary math classroom. Award start: January 2015. (\$15,000)
- 2014 Obtained funding for 6 female computer science students to attend the 2014 Grace Hopper Celebration of Women in Computing, NSF EPSCoR grant, October 2014. (\$5,000)  
 Nominated in UNI MAP-Works as most helpful to a UNI freshman, April 2014.  
 Summer Undergraduate Research Program Award, UNI CHAS, May 27—Aug 1 2014. (\$3,000)  
 Office of the Executive Vice-President & Provost Pre-Tenure Summer Fellowship Award, University of Northern Iowa, June 2014. 66% acceptance rate. (\$4,500)
- 2013 Nominated in UNI MAP-Works as most helpful to a UNI freshman, October 2013.

## Teaching Experience

- UNI
- Spring 2017 **CS 1510 Introduction to Computer Science**. Two sections. Managed course materials and prepared lectures, assignments, and exams for 45 students. Conducted 2 lab sessions.  
**CS 3186 Studies in Computer Science Education**. Supervised and developed activities for undergraduate grading assistants to assist with course CS1510.
- Fall 2016 **CS 1510 Introduction to Computer Science**. Four sections. Managed course materials and prepared lectures, assignments, and exams for 90 students.  
**CS 3470 Networking**. One section. Managed course materials and prepared lectures, labs, assignments, and exams for 30 students.  
**CS 3186 Studies in Computer Science Education**. Supervised and developed activities for undergraduate grading assistants to assist with course CS1510.
- Spring 2016 **CS 1510 Introduction to Computer Science**. Two sections. Managed course materials and prepared lectures, labs, assignments, and exams for 47 students. Conducted 2 lab sections.  
**CS 3186 Studies in Computer Science Education**. Supervised and developed activities for one undergraduate lab assistant TAs and one grading/lab assistant TA for course CS1510.  
**CS 3430 Operating Systems**. One section. Managed course materials and prepared lectures for 32 students.
- Fall 2015 **CS 1510 Introduction to Computer Science**. Two sections. Managed course materials and prepared lectures, labs, assignments, and exams for 40 students. Conducted 2 lab sections.  
**CS 3186 Studies in Computer Science Education**. Supervised and developed activities for two undergraduate lab assistant TAs and one grading assistant TA for course CS1510.
- Spring 2015 **CS 1510 Introduction to Computer Science**. Two sections. Managed course materials and prepared lectures, labs, assignments, and exams for 41 students. Conducted 2 lab sections.  
**CS 3430 Operating Systems**. One section. Managed course materials and prepared lectures for 32 students.  
**CS 3186 Studies in Computer Science Education**. Supervised and developed activities for two undergraduate grader/lab assistant TAs for course CS1510.

- Fall 2014 **CS 1510 Introduction to Computer Science.** Managed course materials and prepared lectures, labs, assignments, and exams for 30 students.  
**CS 3470 Networking.** Managed course materials and prepared lectures, labs, assignments, and exams for 32 students.  
**CS 3186 Studies in Computer Science Education.** Supervised and developed activities for one homework undergraduate TA to assist with course CS1510.
- Spring 2014 **CS 1510 Introduction to Computer Science.** One section. Managed course materials and prepared lectures, labs, assignments, and exams for 28 students. Conducted one lab section.  
**CS 3430 Operating Systems.** Fresh preparation of the computer operating systems course. Managed course materials and prepared lectures for 25 students. Created new projects, homeworks, and exams.  
**CS 3186 Studies in Computer Science Education.** Supervised and developed activities for one lab undergraduate TA to assist with course CS1510.  
**CS 4186 Studies in Operating System Security.** Guided independent study for one student. Topics include readings and experimentation in applied operating system and security concepts, which included file systems, storage devices, forensic analysis tools, device drivers, and core operating system security structures.
- Fall 2013 **CS 1510 Introduction to Computer Science.** Fresh preparation of the introductory course to computer science with the Python programming language. Managed course materials and prepared lectures, labs, assignments, and exams for 30 students. Supervised and developed activities for one lab undergraduate TA and one homework undergraduate TA.  
**CS 3470 Networking.** Fresh preparation of the computer networking course. Managed course materials and prepared lectures for 26 students. Created new programming-oriented projects, course homeworks, and exams.  
**CS 3186 Studies in Computer Science Education.** Supervised and developed activities for one lab undergraduate TA and one homework undergraduate TA to assist with course CS1510.
- FSU  
2013 **COP 5641 Linux Kernel and Device Drivers.** Partial fresh preparation of the graduate-level Linux kernel and device drivers programming course. Managed course materials and prepared lectures, quizzes, and projects for 8 students. Supervised one TA and graduate student projects. [Reviews: median 1 on scale of 1 (highest) to 5]
- 2012 **CIS 4390/COP 5641 Linux Kernel and Device Drivers.** Co-lectured and supervised graduate and undergraduate student projects in the Linux kernel and device drivers programming course.
- 2011 **COP 4610 Introduction to Operating Systems.** Lead lecturer of the undergraduate Introduction to Operating Systems course. Managed course material and prepared lectures and assignments for 35 students. Supervised recitation TA and project development. [Reviews: median 1 on scale of 1 (highest) to 5]
- 2010 **COP 4610/CGS 5765 Introduction to Operating Systems.** Teaching assistant for the recitation/project section of the undergraduate Introduction to Operating Systems course. Prepared and graded projects for 45 students. [Reviews: median 1 on scale of 1(highest) to 5]
- 2008 **CGS 2060 Computer Literacy.** Lead lecturer of the Apple computer literacy course, both online and face-to-face. Supervised 200 online students, 3 graders, and 2 recitation instructors. Prepared and delivered weekly lectures to 40 classroom students. [Reviews: median 1 on scale of 1 (highest) to 5]
- 2007 **CGS 2060 Computer Literacy.** Teaching assistant for the PC computer literacy recitation for 23 students, some administrative duties. [Reviews: median 1 on scale of 1 (highest) to 5]
- Service**
- 2017 **Faculty STEM Summer Camp Counselor,** Introduction to Robots for Girls, UNI, June 2017.  
**Career Workshop, "A World of Girls" for Girl Scouts,** workshop for elementary school girls, February 4<sup>th</sup>, 2017. In coordination with Women in Computing, held two half-hour workshops talking about computer science and different technical careers.  
**National Center for Women in Information Technology (NCWIT),** UNI departmental liaison.  
**Faculty advisor** for UNI Women in Computing (WiC) student group.
- 2016 **Panel Chair,** Social Interactions, 6<sup>th</sup> Workshop on Socio-Technical Aspects in Security and Trust (STAST '16), December 2016.  
**ACM Poster Competition Judge,** Grace Hopper Celebration of Women in Computing. October 2016.  
**Faculty Evaluator,** NCWIT EngageCSEdu submitted materials, August 2016.  
**Committee Member,** UNI Summer STEM Campership (scholarship) Committee, UNI, May-July 2016.  
**Faculty STEM Summer Camp Co-counselor,** Introduction to Robots (co-ed), UNI, June 2016.  
**Faculty STEM Summer Camp Co-counselor,** Introduction to Robots for Girls, UNI, June 2016.  
**Committee Member,** Faculty Hiring Committee, Department of Computer Science, UNI, Spring 2016.  
**National Center for Women in Information Technology (NCWIT),** UNI departmental liaison.

- Faculty advisor** for UNI Women in Computing (WiC) student group.  
**Program Committee Member**, EngageCSEdu Engagement Excellence Award Committee, Jan 2016—Mar 2016.
- 2015 **Program Committee Member**, Missouri Iowa Nebraska Kansas Women in Computing (MINK WIC) Conference, poster competition, October 2015.  
**Faculty advisor** for newly-formed UNI Women in Computing (WiC) student group.  
**Co-organizer** for Women’s History Month Keynote Address/Panel: “Can I Play, Too? Gender Equity in the Age of #Gamergate,” Women & Gender Studies, March 31, 2015.  
**UNI Women and Gender Studies Program Faculty**, 2015.  
**Program Committee Member**, TinyToCS Volume 3, February 2015. Reviewed 6 abbreviated journal papers.  
**Faculty Mentor for Iowa State Cyber Defense Competition**, assisted undergraduate student teams prepare and participate, February 2015.
- 2014 **National Center for Women in Information Technology (NCWIT)**, UNI departmental liaison.  
**Robotic Workshop, Cedar Valley Expanding Your Horizons (Fall)** workshop for middle school girls, October 2014. Gave three 1-hour workshops to total of 25 girls teaching basic programming and problem-solving skills using Lego Mindstorm EV3 robots.  
**Robotic Workshop, Cedar Valley Expanding Your Horizons (Spring)** workshop for middle school girls, March 2014. Gave three 1-hour workshops to total of 24 girls teaching basic programming and problem-solving skills using Lego Mindstorm EV3 robots.  
**Faculty Mentor for Iowa State Cyber Defense Competition**, assisted undergraduate student teams prepare and participate, February 2014.
- 2013 **National Center for Women in Information Technology (NCWIT)**, UNI departmental liaison.  
**Panel Chair**, Passwords and Authentication, Annual Computer Security and Applications Conference (ACSAC 29), December 2013.  
**Program Committee Member**, Annual Computer Security and Applications Conference (ACSAC 29).  
**Shepherd**, Pitfalls in the Automated Strengthening of Passwords, Schmidt et al., appears in ACSAC 29.
- 2011-2012 **National Center for Women in Information Technology (NCWIT)**, UNI departmental liaison.  
**ACM Nomination Committee Member**, local chapter.
- 2010 **ACM Programming Organizer**, developed two questions used in the Spring FSU ACM Programming Contest, March 2010.  
**Panel Participant**, FSU Graduate Research & Creativity Award, March 2010.  
**Panel Participant**, FSU Workshop for Undergraduates Interested in Graduate School, March 2010.
- 2009 **Shadow Program Committee**, 22<sup>nd</sup> ACM Symposium on Operating System Principles.  
**Scribe**, the ACM Symposium on Operating Systems Principles and the USENIX Security Symposium.

## Students Supervised

- Spring 2017 Beau Brown, undergraduate thesis and undergraduate research assistant  
Malissa Keller, undergraduate thesis  
Danielle Heim, undergraduate thesis  
Coved Oswald, undergraduate research assistant
- Summer 2016 Beau Brown, undergraduate research assistant (SURP student)  
Coved Oswald, undergraduate research assistant (SURP student)
- Spring 2016 Chelsey Baysinger, undergraduate thesis  
Lisa Diercks, undergraduate thesis / honors thesis
- Fall 2015 Coved Oswald, undergraduate thesis / undergraduate research assistant  
Cole Boudreau, undergraduate thesis / undergraduate research assistant / honors thesis  
Jessica Thatcher, undergraduate thesis
- Summer 2015 Coved Oswald, undergraduate research assistant (SURP student)  
Cole Boudreau, undergraduate research assistant (SURP student)
- Spring 2015 Jonathan Schlicht, undergraduate thesis / undergraduate research assistant  
Scott Recker, undergraduate thesis  
Abigail Beets, undergraduate thesis
- Fall 2014 Mojtaba Al Fardan, undergraduate thesis / undergraduate research assistant (SURP student)  
Levi Bostian, undergraduate thesis
- Spring 2013 Nigel Ploof, undergraduate research assistant

## Press Coverage

- 2017 Ashfaqzaman, M. MVMs: Magic in Math Classroom. STEM Stories, University of Northern Iowa.  
[https://stemed.uni.edu/sites/default/files/print\\_versions/01\\_02\\_2017\\_mvm\\_1.pdf](https://stemed.uni.edu/sites/default/files/print_versions/01_02_2017_mvm_1.pdf). February 2017.

- 2016 Izer, K. A woman of innovation. University Relations, University of Northern Iowa. <https://www.uni.edu/resources/features/woman-innovation>. December 2016.  
UNI Alumni Association, Panther Caucus. UNI Leading the Way for Women in Technology. <https://unialum.org/panther-caucus/uni-leading-way-women-technology>. December 2016.
- Yepez, M. Faculty Spotlight: Sarah Diesburg, Computer Science. The Update: College of Humanities Arts and Sciences, Issue 2016-2017 No. 2, p.7. <http://www.uni.edu/chas/sites/default/files/update2.pdf>
- 2015 Crippes, C. UNI group focuses on computer science and feminism. Waterloo Courier. May 2015 [http://wcfcourier.com/news/local/education/uni-group-focuses-on-computer-science-and-feminism/article\\_bfa6057a-a85c-50ed-a345-d2780943b784.html](http://wcfcourier.com/news/local/education/uni-group-focuses-on-computer-science-and-feminism/article_bfa6057a-a85c-50ed-a345-d2780943b784.html)
- Izer, K. Computing for equality. University Relations, University of Northern Iowa. <http://www.uni.edu/resources/features/computing-equality> .
- Montelius, A. Women in Computing -- Department of Computer Science. The CHAS Update. University of Northern Iowa. Issue 4, February 2015, page 14. [http://www.uni.edu/chas/sites/default/files/documents/janfeb\\_0.pdf](http://www.uni.edu/chas/sites/default/files/documents/janfeb_0.pdf) .
- Sandrock, T. Roboshop. CHAS Communiqué. Volume 4, Winter 2015, page 19. [http://www.nxtbook.com/nxtbooks/uni/communique\\_winter2015/#/1/OnePage](http://www.nxtbook.com/nxtbooks/uni/communique_winter2015/#/1/OnePage) .
- 2014 J. Aldershoff. Researchers: Confidential data on 2nd hand USB drives easily recoverable. Myce. August 27, 2014. <http://www.myce.com/news/researchers-confidential-data-on-second-hand-usb-drives-easily-recoverable-72537/>
- Rachel Routier. Cyberdefense Competition Team, The Update, College of Humanities, Arts and Sciences, UNI, Issue 6, page 7, March 2014. [http://www.uni.edu/chas/sites/default/files/march2014\\_0.pdf](http://www.uni.edu/chas/sites/default/files/march2014_0.pdf)
- 2009 Elizabeth Copps. Gone in a Flash. Research in Review Fall/Winter 2009, p61. <http://www.rinr.fsu.edu/issues/2009fallwinter/doc/rinrfallwinter2009.pdf>
- Doug Blackburn. FSU student develops software prototype to erase electronic files, Tallahassee Democrat, October 3, 2009. <http://pqasb.pqarchiver.com/tallahassee/access/1871398611.html?FMT=ABS&date=Oct+03,+2009>

### **Professional Society Memberships**

ACM, IEEE, NCWIT, Upsilon Pi Epsilon, Golden Key, Philanthropic Educational Organization (P.E.O.), Systems