# Emilee J. Rader (formerly E. Patrick)

### **Curriculum Vitae**

Communication Arts & Sciences 404 Wilson Road, Room 420 East Lansing, MI 48824-1212 emilee@msu.edu http://msu.edu/~emilee http://bitlab.cas.msu.edu/

Office: 517-432-1334 | Fax: 517-355-1292 | Mobile: 847-514-0481

### **APPOINTMENTS**

2011- Assistant Professor and AT&T Scholar
 Department of Media and Information, College of
 Communication Arts & Sciences, Michigan State University
 2010-11 Assistant Professor
 Department of Communication Studies, Northwestern University
 2009-10 Computing Innovation Fellow (postdoc)
 Center for Technology and Social Behavior, Northwestern University
 1999-04 Senior Human Factors Scientist
 User Centered Solutions Lab, Motorola Labs

### **EDUCATION**

Ph.D., Information (Fall 2009) School of Information, University of Michigan

Master of HCI (August 1999)

Human Computer Interaction Institute, Carnegie Mellon University

B.S., Psychology (Fall 1995)

University of Wisconsin at Madison (Graduated with Distinction)

### GRANTS AND FELLOWSHIPS

Title / Source TWC: Small: Designing a Coordination Mechanism for Managing Privacy as a Common-Pool Resource National Science Foundation (CNS-1524296) Role: PI	<b>Period</b> 2015-2018	<b>Amount</b> \$463,107
III: HCC: Small: Effects of Automated Information Selection and Presentation in Online Information Systems National Science Foundation (IIS-1217212) Role: PI	2012-2017	\$486,093
REU supplement 2013: \$16,000		

TC: Small: Collaborative Research: Influencing 2011-2017 \$241,589

Mental Models of Security (joint with Dr. Rick Wash)

National Science Foundation (CNS-1115926)

Role: PI

REU Supplement 2015: \$8,000 REU Supplement 2014: \$8,000 REU Supplement 2013: \$8,000 REU Supplement 2012: \$16,000

Computing Innovation Fellowship
Computing Research Association (CRA) and NSF
(in conjunction with CNS-0937060)

2009-2010 \$140,000

### PEER-REVIEWED PUBLICATIONS

Wash, R., **Rader, E.**, Berman, R., and Wellmer, Z. (2016) Understanding Password Choices: How Frequently Entered Passwords are Re-used Across Websites. *SOUPS 2016*. Acceptance rate 28%.

Jung, Y. and **Rader, E.**. (2016). The imagined audience and privacy concern on Facebook: differences between producers and consumers.  $Social\ Media + Society$ , doi: 10.1177/2056305116644615.

**Rader, E.** and Wash, R. (2015). Identifying Patterns in Informal Sources of Security Information. *Journal of Cybersecurity*, doi: 10.1093/cybsec/tyv008.

Wash, R. and **Rader, E.** (2015). Too Much Knowledge? Security Beliefs and Protective Behaviors Among United States Internet Users. *SOUPS 2015*. Acceptance Rate 24%.

**Rader, E.** and Gray, R. (2015). Understanding User Beliefs About Algorithmic Curation in the Facebook News Feed. *CHI 2015*. Acceptance Rate 23%. doi: 10.1145/2702123.2702174

**Rader, E.** (2014). Awareness of Behavioral Tracking and Information Privacy Concern in Facebook and Google. *SOUPS 2014*. Acceptance Rate 27%.

Wash, R., **Rader, E.**, Vaniea, K. and Rizor, M. (2014). Out of the Loop: How Automated Software Updates Cause Unintended Security Consequences. *SOUPS 2014*. Acceptance Rate 27%

Vaniea, K., Rader, E., Wash, R. (2014). Betrayed by updates: how negative experiences affect future security. *CHI 2014*. Acceptance Rate 23%. doi: 10.1145/2556288.2557275

Rader, E., Velasquez, A., Hales, K., and Kwok, H. (2012). The Gap Between Producer Intentions and Consumer Behavior in Social Media. *GROUP 2012*. Acceptance rate 37%. doi: 10.1145/2389176.2389213

Rader, E., Wash, R., and Brooks, B. (2012). Stories as Informal Lessons About Security. SOUPS 2012. Acceptance rate 21%. doi: 10.1145/2335356.2335364

Wash, R. and **Rader, E.** (2011). Influencing Mental Models of Security: A Research Agenda. NSPW~2011. doi: 10.1145/2073276.2073283

**Rader, E.**, Echelbarger, M. and Cassell, J. (2011). Brick by brick: Iterating interventions to bridge the achievement gap with virtual peers. *CHI 2011*, 2971-2974. Acceptance rate 26%. doi: 10.1145/1978942.1979382

**Rader, E.** (2010). The Effect of Audience Design on Labeling, Organizing, and Finding Shared Files. *CHI 2010*, 777-786. Acceptance rate 22%. doi: 10.1145/1753326.1753440

**Rader, E.** (2009). Yours, Mine, and (Not) Ours: Social Influences on Group Information Repositories. CHI~2009, 2095-2098. Best Paper Honorable Mention (top 5% of papers). Acceptance rate 25%. doi: 10.1145/1518701.1519019

**Rader, E**. and Wash, R. (2008). Influences on Tag Choices in del.icio.us. *CSCW 2008*, 239-248. Acceptance rate 23%. doi: 10.1145/1460563.1460601

Wash, R. and **Rader, E**. (2007). Public Bookmarks and Private Benefits: An Analysis of Incentives in Social Computing. *ASIS&T Annual Meeting 2007*.

Batcheller, A. L., Hilligoss, B., Nam, K., **Rader, E.**, Rey-Babarro, M., & Zhou, X. (2007). Testing the Technology: Playing Games with Video Conferencing. *CHI 2007*, 849-852. Acceptance rate 25%. doi: 10.1145/1240624.1240751

**Patrick, E.**, Cosgrove, D., Slavkovic, A., Rode, J.A., Verratti, T. and Chiselko, G. (2000). Using a large projection screen as an alternative to head-mounted displays for virtual environments. *CHI 2000*, 478-485. Acceptance rate 21%. doi: 10.1145/332040.332479

### CONFERENCE AND WORKSHOP PAPERS

Vaniea, K., Rader, E., and Wash, R. (2014) Mental Models of Software Updates. *International Communication Association. Seattle.* 

Wash, R. and **Rader, E.** (2010). Using Economic Modeling to Predict User Behavior. *CHI 2010 Workshop: Models, theories and methods of studying online behavior*, Atlanta, GA.

Rader, E. (2008). Group Information Repositories as Social Systems. 4th Annual SIG SI Social Informatics Research Symposium, Columbus, OH.

Wash, R. and **Rader, E.** (2008). Understanding del.icio.us Tag Choice Using Simulations. *iSchools Conference 2008*, Los Angeles, CA.

Hofer, E., Rader, E., and Finholt, T. (2005). Toward supporting virtual collocation. WACE 2005 (Workshop on Advanced Collaborative Environments), Seattle, WA.

Rader, E. (2002). Small Group Communication over the Access Grid: A Case Study. *Proceedings of the 2002 Access Grid Retreat*, San Diego, CA.

Rader, E. (2001). Barriers to Collaboration: User-Centered Research and the Access Grid. Proceedings of the 2001 Access Grid Retreat, Argonne National Labs.

### **POSTERS**

Berman, R., Wash, R. and Rader, E. (2015). Predicting Password Practices. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Finch, J. and Rader, E. (2015). Differentiating the Effects of Social Influence and Homophily on Social Networks. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Pinto Santos, R.P., Wash, R., and Rader, E. (2015). Cleaning Computer Security Data. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Rosemurgy, P. and Rader, E. (2015). Modeling the Diffusion of Shared Votes on Facebook. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Hoban, K., Rader, E., Wash, R., and Vaniea, K. (2014). Computer Security Information in Stories, News Articles, and Education Documents. *SOUPS 2014*. **Distinguished Poster Award Winner.** 

Jung, Y. and Rader, E. (2014). Transitive Privacy Concern in Social Networks. *SOUPS* 2014.

Baker, C. and Rader, E. (2014). Algorithmic Curation: Understanding the Content Network. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Bisht, S., Vaniea, K., Wash, R., and Rader, E. (2014). What Does Computer Security Cost You? Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Rose, P. and Rader, E. (2014). Online Information Privacy: Understanding User Concern and Behavior. MSU University Undergraduate Research and Arts Forum (UURAF).

Hoban, K., Rader, E., Vaniea, K., and Wash, R. (2014). Computer Security: Stories, Articles, and Education Documents. MSU University Undergraduate Research and Arts Forum (UURAF).

Elhazzat, J., Hasselbeck, T., Vaniea, K., Rader, E., and Wash, R. (2014). Reconstructing Digital Events. MSU University Undergraduate Research and Arts Forum (UURAF).

Rizor, M., Vaniea, K., Rader, E., Wash, R. (2013). Out of the Loop: How Automated Software Updates Cause Unintended Security Consequences. MSU Cyberinfrastructure Days 2013. Winner of the 2nd place prize for Best Poster.

Heldt, R., Vaniea, K., Wash, R., and Rader, E. (2013). The difficulties of Tracking Users' Online Passwords. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Hinck, A., Wash, R., Vaniea, K., Rader, E. (2013). What do YOU Think is a Virus? Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Hoban, K., Girouard, Z., Rader, E., Vaniea, K., and Wash, R. (2013). Computer and Information Security: Educating the User. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Saxton, N., Vaniea, K., Wash, R., Rader, E. (2013). Tracking Browsing Context in Internet Security Behaviors Research. Mid-Michigan Symposium for Undergraduate Research Experiences (MiD-SURE).

Olsen, T., Saxton, N., Vaniea, K., Wash, R., and Rader, E. (2012). Do People Behave Securely Online? MSU University Undergraduate Research and Arts Forum (UURAF).

Rizor, M., Wash, R., Vaniea, K., and Rader, E. (2012). User Understanding of Security Software Updates: An Interdisciplinary Approach. MSU University Undergraduate Research and Arts Forum (UURAF).

Zemanek, N., Velasquez, A., Rader, E. and Wash, R. (2012). Content Analysis of Security Education Materials Created for User Consumption. MSU Summer Undergraduate Research Forum (SURF).

Rader, E. (2007). Just email it to me! Why things get lost in shared file repositories. *GROUP* 2007, Nov. 4-7, 2007, Sanibel Island, FL.

Rader, E. and Wash, R. (2006). Tagging with del.icio.us: Social or Selfish? *CSCW 2006*, Nov. 4-8 2006, Banff, Alberta, CA.

#### **EXTERNAL PRESENTATIONS**

Rader, E. (2016). Examining Derived Data as a Common Pool Resource. CSCW @ Scale Workshop, *University of Michigan School of Information*, May 6, 2016.

Rader, E. (2016). Stories, News, and Advice: Patterns in Informal Sources of Security Information. *PennState College of Information Sciences and Technology*, March 14, 2016.

Rader, E. (2016). Accidental Transparency: How the Facebook News Feed Algorithm Affects User Beliefs and Behavior. *Syracuse University, School of Information Studies*, March 10, 2016

Rader, E. (2015). A Filter Bubble For Relationships, Algorithmic Transparency Workshop, Tow Center for Digital Journalism at Columbia University, March 27, 2015.

Rader, E. (2011). Understanding Infrastructure for Social Information Sharing, *Michigan State University, Department of Telecommunication, Information Studies and Media*, April 15, 2011.

Rader, E. (2010). How "Social" is the Social Web? Northwestern University, Department of Communication Studies, January 22, 2010.

Rader, E. (2010). How "Social" is the Social Web? *University of Maryland Baltimore County, Department of Information Systems*, January 14, 2010.

Rader, E. (2010). Exploring the "Social" Nature of Social Media in Organizations. NCA 2010 Panel: Social Media and the Communication of Knowledge in the Workplace, San Francisco, CA.

Rader, E. (2009). Just Email It to Me! Why Things Get Lost in Group Information Repositories. Rutgers University, School of Communication and Information Studies, February 6, 2009

Rader, E. (2007). What Did You Call It? How Document Labeling and Organizing Affect Finding in Shared Repositories. *Johns Hopkins University Applied Physics Laboratory*, November 8, 2007

Rader, E. (2007). What did you call it again? Language Use in Group Information Management Systems. *GROUP 2007 Doctoral Colloquium*, Sanibel Island, FL.

Rader, E. and Johnston, E. (2005). Cooperation and Competition in Video Games: Implications for Collaborative Systems. *Connections* 2005, Montreal, Quebec, Canada.

Patrick, E. (2001). Access Grid Node User Studies: Distributed Video Mediated Communication. *Motorola Labs 2001 Real Technology Series*, Schaumburg, IL.

Patrick, E. (2001). User Centered Evaluation of the Access Grid. Access Grid Human Factors Workshop, Argonne National Labs.

Patrick, E. (2001). User Centered Research and the Access Grid: Requirements for Collaboration. *Access Grid Retreat 2001*, Argonne National Labs.

Patrick, E. (2001). The Access Grid: Beyond Videoconferencing. *Chicago chapter of ACM SIG-CHI*, Chicago IL.

## **BOOK CHAPTERS**

Wash, R. and **Rader, E.** (2012). Folk Models of Home Computer Security. Markus Jacobsson (Ed.). *The Death of the Internet*, Wiley; ISBN 978-1118062418

Birnholtz, J., **Rader, E.**, Horn, D.B., and Finholt, T. (2009). Enabling Remote Participation in Research. B. Whitworth and A. de Moor (Eds.) *Handbook of Research on Socio-Technical Design and Social Networking Systems*. Information Science Reference; ISBN 978-1605662640

### TECHNICAL REPORTS

Metcalf, C. and **Patrick, E.** Sharing Photos: Sending, Receiving, and Reviewing Personal Photographs with Family and Friends. *Motorola Labs Technical Report*, February 2003, Schaumburg IL.

**Patrick, E.** and Metcalf, C. Mediated Communication Between Extended Family and Friends: A Case Study. *Motorola Labs Technical Report*, September 9, 2001, Schaumburg IL.

**Patrick, E.** and Marturano, L. GTSS Information Architecture User Study Report. *Motorola Labs Technical Report*, June 2001, Schaumburg IL.

Patrick, E. Motorola Labs Website Usability Report. *Motorola Labs Technical Report*, January 2000, Schaumburg IL.

Patrick, E. Motorola "CoPilot" Usability Evaluation. *Motorola Labs Technical Report*, November 1999, Schaumburg IL.

#### INTERNAL PRESENTATIONS

- 2016 MIS PhD 2016 Research Seminar Series Topic: How the Facebook News Feed Algorithm Affects User Beliefs and Behavior. February 4, 2016.
- 2015 Computer-Assisted Reporting, Journalism 407 Topic: Algorithmic curation and the news. October 13, 2015.

Sharper Focus, Wider Lens, MSU Honors College Panel Topic: A Filter Bubble For Relationships, March 30, 2015.

Social Media News & Information, Journalism 821 Topic: Algorithmic curation and the news. March 16, 2015.

- 2014 MIS Proseminar Topic: Human Computer Interaction. September 5, 2014.
- MSU Cyberinfrastructure Days Panel Topic: Research-Enabling Tools and Technologies:
   Challenges and Experiences from a MSU PI Perspective. October 25, 2013.

   Lab Environmental Reporting, Journalism 472 Topic: Face Recognition. October 3, 2013.
   MIS Program Job Market Panel September 27, 2013.

Research Data Management Cafe Topic: Data Management in Interdisciplinary Projects. April 29, 2013.

- 2012 MIS Proseminar Topic: Information Science. March 16, 2012.
   Media Impacts on Society, TC401. Topic: Incentives and constraints in online communities. MSU Guest Lecture. November 15, 2012.
- 2011 Applied Research Methods, (MTS 525) NU Guest Lecture, Feb. 28, 2011.

  MSU Comm Arts Brownbag Series, Oct. 27, 2011.

  MIS Program Job Market Panel, Sept. 30, 2011.
- 2010 NU SoC Century Scholars Invited Talk, Nov. 11, 2010. MTS Graduate Seminar (MTS 501). NU Guest Lecture. Applied Research Methods, (MTS 525) NU Guest Lecture.
- 2009 Doctoral Foundations (SI 701). SI Guest Lecture. SI Academic Job Search Panel, Apr. 23, 2010.
- 2008 Human Interaction in Information Retrieval (SI 531). SI Guest Lecture. Research Methods (SI 840). SI Guest Lecture.
- 2006 SI CREW Seminar Invited Talk, Apr. 10, 2006.

## UNIVERSITY SERVICE

Michigan State University

2016 Media and Information Dept. PhD Committee

2015 Media and Information Dept. PhD Committee Served on the MIS PhD Program Review Committee Co-Organized MIS Research Symposium Reviewer for CAS summer research proposals

2014 Panelist for MSU Women's Alliance session on "Working Women"
Co-Organized MIS Research Symposium

Presented a Responsible Conduct of Research session on "Management of Data"

2013 Director of Graduate Studies, TISM Co-Organized MIS Research Symposium

2012 Media and Information Studies PhD Committee

Co-Organized First Annual MIS Research Symposium, and served as judge Served as a mentor for a Summer Research Opportunities (SROP) student Served on a university-wide IT services advisory committee

Northwestern University, Communication Studies Department

2011 Technology and Social Behavior PhD Admissions committee

2010 Organizer of TSB Seminar Series (with Darren Gergle)

Chair's Advisory Committee, Department of Communication Studies

 $University\ of\ Michigan,\ School\ of\ Information$ 

2006 PhD Admissions Committee

2005 President of the Doctoral Student Organization

**Doctoral Committee** 

### PROFESSIONAL SERVICE

Conference Program Committees

ACM Conference on Computer-Human Interaction (CHI) 2010, 2012, 2014

ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) 2013, 2015

SOUPS (Symposium on Usable Privacy and Security) 2013, 2015, 2016

Reviewer (Journals)

Human Computer Interaction Journal

International Journal of Human Computer Studies

Journal of Cybersecurity

Reviewer (Conferences)

WebSci 2016

CSCW 2008-2017

CHI 2006-2016

IUI 2015

Graphics Interface 2015 (HCI Track)

UIST 2014

WWW 2012

iConference 2012

**ICWSM 2011** 

**GROUP 2009** 

Invited Panelist (Grant Proposals)

Israel Science Foundation, 2016

National Science Foundation (NSF), 2011-2013, 2016

Austrian Research Promotion Agency (FFG), 2011

### **TEACHING**

Instructor of Record

Digital Footprints: Privacy Online (undergraduate, every spring)

Spring 2016 (as MI 239, required course)

Spring 2012; Fall 2012, 2013 (as TC 291, special topic course)

Winter 2011 (Northwestern Comm Studies 395)

**Human Computer Interaction** 

Spring 2015 (CAS 992, PhD special topic course) Spring 2013-2016 (as MI 845, required course) Spring 2012 (as TC 891, special topic course)

Online Communities (undergraduate)

Spring 2011 (Northwestern Comm Studies 378)

Perspectives on Social Media Research (PhD special topic course)

Spring 2011 (Northwestern Comm Studies 525)

Independent Study Projects Supervised Rebecca Gray (MIS PhD): Spring 2013 Yumi Jung (MIS PhD): Fall 2012

Co-Instructor

Doctoral Development Seminar (University of Michigan, School of Information) with Cory Knobel and Yong-Mi Kim, Fall and Winter 2008

#### STUDENTS/POSTDOCS SUPERVISED

[All students and postdocs are from Michigan State University unless otherwise noted.]

Postdoctoral Researchers Kami Vaniea, 2012-2014

PhD Advisor

Yumi Jung, 2012-present Kelley Cotter, 2016-present Alina Lungeanu (Northwestern), 2010-2011

Committee Member Soo Jeong Hong (prelim) Janine Slaker (prelim) Jacob Solomon (dissertation)

Graduate Research Assistants

Kelley Cotter, MIS PhD. 2016-present

Chris Fennell, MIS PhD. 2016-present

Chankyung Pak, MIS PhD. 2015-2016

Janine Slaker, MIS PhD. 2015-2016

Andrew Osentoski, Criminal Justice MA. 2015

Rebecca Gray, MIS PhD. 2013-2014

Yumi Jung, MIS PhD. 2012-2013

Laeeq Khan, MIS PhD. 2012-2013

Brandon Brooks, MIS PhD. 2011-2012

Jacob Solomon, MIS PhD. 2011-2012

Alcides Velasquez, MIS PhD. 2011-2012

Shih-Chi Steven Chen, EECS MS, Northwestern. 2010-2011

MA Students Advised

 $Carl\ Anderson,\ Media\ and\ Information.\ 2013-present\ (as\ Chair)$ 

Xin Ha, Media and Information. 2015-present (as Advisor)

Bill Morgan, Media and Information. 2012-present (as Committee Member)

Chris Hamrick, Media and Information. 2011 (as Committee Member)

Alison Virag-McCann, Media and Information. 2012-2013 (as Committee Member)

Qin Zhang, Media and Information. 2015-present (as Advisor)

Former Undergraduate Research Assistants

Howard Akumiah, Fall 2012-Spring 2013

Pierre Arellano (Washington State University), MSU SROP Program 2012

Cody Baker (University of Evansville), Summer REU 2014

Ruth Berman (Macalester College), Summer REU 2015

Shiwani Bisht (Cornell University), Summer REU 2014

Jallal Elhazzat, Spring 2014

James Finch, Summer REU 2015

Zack Girouard, Fall 2012-Summer 2013

Leanarda Gregordi, Fall 2012

Tim Hasselbeck, Spring 2014

Raymond Heldt, Summer REU 2013

Alexandra Hinck (Beloit College), Summer REU 2013

Katie Hoban, Summer REU 2013 and 2014; and Fall 2013-Fall 2014

Meghan Huynh, Fall 2014-Spring 2016

Nathan Klein (Oberlin College), Summer REU 2014

Kyle Kulesza, Fall 2013-Spring 2014

Helen Kwok (Northwestern University), 2011

Lauren McKown, Spring-Summer 2012

Manotej Meka, Spring 2016

Simone Merendi, Spring 2016

Tyler Olsen, Fall 2012-Spring 2013

Ruchira Ramani, Fall 2013

Michelle Rizor, Fall 2012-Spring 2014

Paul Rose, 2012-2015

Paul Rosemurgy, Fall 2014-Spring 2015; and Summer REU 2015

Scott Rucinski, Fall 2013-Spring 2014

Robert Plant Pinto Santos (Universidade Federal do Ceará, Brazil), Summer REU 2015

Nick Saxton, Summer REU 2013 and Fall 2012-Fall 2013

Kimberly Setili, Spring 2012 and Summer REU 2012

Alison Thierbach, Summer REU 2012

Elaine Wang (Northwestern), 2011

Zac Wellmer, Fall 2015

Nate Zemanek, Summer REU 2012