

Motahhare Eslami
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EDUCATION

PhD Candidate, Computer Science 2012- 2018 (expected)
University of Illinois at Urbana-Champaign, Illinois, United States

Research Assistant, Computer Engineering Department 2011- 2012
Sharif University of Technology, Tehran, Iran

Master of Science, Computer Engineering 2009- 2011
Sharif University of Technology, Tehran, Iran

Bachelor of Science, Computer Engineering 2005-2009
Sharif University of Technology, Tehran, Iran

RESEARCH INTERESTS

- Social Computing
 - Human-Computer Interaction
 - Data Mining
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AWARDS AND HONORS

- **Google PhD Fellowship** 2017
- **C.W. Gear Outstanding Graduate Student Award** 2017
(Awarded annually to a graduate student who has demonstrated excellence in research, Department of Computer Science, UIUC)
- **Adobe PhD Fellowship Finalist** 2017
- **Saburo Muroga Endowed Fellowship** 2016
(Awarded to outstanding graduate students in Computer Science, UIUC)
- **Feng Chen Memorial Award** 2016
(Awarded to students who are first authors on a paper that has won a best paper award, Department of Computer Science, UIUC)
- **Facebook PhD Fellowship Finalist** 2016
- Selected to participate in **Rising Stars in EECS** 2015, 2016
(An Academic Career Workshop for nearly 60 top EECS women scholars in academia)
- **Best Paper Award** at the ACM Conference on Human Factors in Computing Systems (CHI) 2015
- **CS Grace Hopper Conference Scholarship** 2014
- **Honorable Mention** in Facebook Midwest Regional Hackathon 2013
- **Exceptional Talent Award** from the Master Program, Computer Engineering Department of Sharif University of Technology 2011
- **3rd Rank** according to GPA among all M.Sc. students of Computer Engineering at Information Technology, Sharif University of Technology 2011
- **Exceptional Talent Award** from the B.Sc. Program in Information Technology from Computer Engineering Department of Sharif University of Technology 2009

- **1st rank** according to GPA among B.Sc. students of Computer Engineering, Information Technology in Sharif University of Technology 2009
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PUBLICATIONS

Peer-Reviewed Proceedings/Conference Papers

- M. Eslami, K. Vaccaro, K. Karahalios, and K. Hamilton. “Be careful; things can be worse than they appear”: Understanding Biased Algorithms and Users’ Behavior around Them in Rating Platforms. *The AAAI International Conference of Weblogs and Social Media (ICWSM)*, 2017. (Acceptance Rate: 14%)
- J. Kulshrestha, M. Eslami, J. Messias, M. B. Zafar, S. Ghosh, K. Gummadi, and K. Karahalios. Quantifying Search Bias: Investigating Sources of Bias for Political Searches in Social Media. *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW)*, 2017. (Acceptance Rate: 34.5%)
- M. Eslami, K. Karahalios, C.Sandvig, K. Vaccaro, A. Rickman, K. Hamilton, and A. Kirlik. First I “like” it, then I hide it: Folk Theories of Social Feeds. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*, 2016. (Acceptance Rate: 23.5%)
- M. Eslami, A. Rickman, K. Vaccaro, A. Aleyasen, A. Voung, K. Karahalios, K. Hamilton, and C.Sandvig. “I always assumed that I wasn’t really that close to [her]”: Reasoning about Invisible Algorithms in News Feeds. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*, 2015. (Acceptance Rate: 23%) **Best Paper Award**
- M. Eslami, A.Aleyasen, R.Zilouchian Moghadam and K. Karahalios. Friend Grouping Algorithms for Online Social Networks: preference, bias, and implications. *International Conference on Social Informatics (SocInfo)*, 2014. (Acceptance Rate: 23%)
- K.Hamilton, K.Karahalios, C.Sandvig and M.Eslami. A Path to Understanding the Effects of Algorithm Awareness. *Alt.Chi: Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI)*, 2014. (Acceptance Rate: 37.5%)
- M. Eslami, H. R. Rabiee, and M. Salehi. Sampling from Diffusion Networks. *ASE and IEEE International Conference on Social Informatics*, 2012. (Acceptance Rate: 11.5%)
- Payam Siyari, H. R. Rabiee, M. Salehi and M. Eslami. Network Reconstruction under Compressive Sensing. *ASE and IEEE International Conference on Social Informatics* , 2012. (Acceptance Rate: 11.5%)
- M. Eslami, H. R. Rabiee, and M. Salehi. Diffusion-Aware Sampling and Estimation in Information Diffusion Networks. *IEEE International Conference on Social Computing*, 2012. (Acceptance Rate < 10%)
- M. Eslami, H. R. Rabiee, and M. Salehi. DNE: A Method for Extracting Cascaded Diffusion Networks from Social Networks. *IEEE International Conference on Social Computing*, 2011. (Acceptance rate: 9.8%)

Journal Papers

- P. Siyari, H. R. Rabiee, M. Salehi, and M. Eslami. Network Reconstruction under Compressive Sensing. *ASE Human Journal*. Vol.1, issue 3, pp. 130-143, 2012.
- E. S. Hosseini, V. Esmaelzadeh, and M. Eslami. A Hierarchical Sub-Chromosome Genetic Algorithm (HSC-GA) to Optimize Power Consumption and Data Communications Reliability in Wireless Sensor Networks. *Wireless Personal Communications (Springer)*. Vol. 80, no. 4, pp. 1579-1605, Oct. 2014.

Workshop Papers & Extended Abstracts

- M. Eslami and K. Karahalios. Embracing Seamfulness and Uncertainty in Designing around Hidden Algorithms. *ACM Conference on Human Factors in Computing Systems (CHI)*, Workshop on Designing for Uncertainty in HCI: When Does Uncertainty Help?, 2017.

- M. Eslami and K. Karahalios. Investigating Users' Understanding of Invisible Algorithms and Designing around It *The AAAI International Conference of Weblogs and Social Media (ICWSM)*, Workshop on Studying User Perceptions and Experiences with Algorithms, 2017.
- M.Eslami. Understanding and Designing around Users' Interaction with Hidden Algorithms in Sociotechnical Systems. *ACM Conference on Computer Supported Cooperative Work (CSCW) Doctoral Colloquium*, 2017.
- M. Eslami, A. Aleyasen, K. Karahalios, K. Hamilton and C. Sandvig. FeedVis: A Path for Exploring News Feed Curation Algorithms. *ACM Conference on Computer Supported Cooperative Work (CSCW)*, Peer Reviewed Software Demo, 2015.
- M. Eslami, A.Aleyasen, R.Zilouchian Moghadam and K. Karahalios. Evaluation of Automated Friend Grouping in Online Social Networks. *Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI)*, 2014.

Posters

- M. Eslami, A. Rickman, K. Vaccaro, A. Aleyasen, K. Karahalios, K. Hamilton, and C.Sandvig. Exposure to the Invisible: Reasoning about Hidden Algorithms in the News Feed, *International Conference on Computational Social Science (IC²S²)*, 2015.
- M. Eslami. Exposure to the Invisible: Algorithm Awareness from the Individual to the Collective. *CSL Student Conference, University of Illinois at Urbana-Champaign*, 2015.
- N.Spirin, M.Eslami, J.Ding, P.Jain, B.Bailey and K.Karahalios. Searching for Design Examples with Crowdsourcing. *International World Wide Web Conference (WWW) Poster*, 2014.
- M.Eslami, A.Aleyasen and K. Karahalios. Make Community Detection More Human. *The Human Computer Interaction Consortium (HCIC) Boaster*, 2013.

RESEARCH PROJECTS

- **How Much Transparency on What?** Feb 2017-Present
Finding out “how much” and “what type” of information is enough to add to an opaque algorithmic advertising system to provide users with a more informed, engaged, and trustworthy interaction with online ads
- **Understanding Biased Algorithms and Users' Behavior around Them in Rating Platforms** March 2016-Present
Developing a cross-platform algorithm audit technique to detect potential biases of rating algorithms in online hotel rating platforms (such as Booking.com) and analyzing users' reviews to understand if, how, and in what ways users perceive and manage such biases
- **Quantifying Search Engines Bias** Nov 2015-Present
Understanding whether and how search engines can create political bias in search results and distinguishing between the bias that arises from the data that is input to a ranking algorithm of the search engine from the bias that arises from the ranking algorithm itself.
- **Exploring News Feed Curation Algorithms: From Awareness to Engagement** May 2013-Nov 15
Developing a Facebook application, *FeedVis*, to reveal to users the difference between the algorithmically curated and an unadulterated News Feed, and used it to study whether users are aware of this curation, how they perceive this difference and whether and how it changes their engagement with the feed
Press: TIME, The Washington Post, BBC, Huffingtonpost, NewScientist, MIT Center for Civic Media, Social Science Space, The Open Standard, MIT Technology Review
- **Effects of Social Media on Crowdfunding** Sep 2014- May 2015
Examining the effects of social media including social attention, tie strength and diffusion of responsibility on patterns of crowdfunding

- **Searching Design by Crowd** Jan 2013- Jan 2014
Conducting a study over strategies for searching design on a crowdsourcing framework
- **Evaluation of Friend Grouping Algorithms in Online Social Networks** Sep 2012- Sep 2014
Developing a group detection application by using common community detection algorithms over the *Facebook* network to evaluate these algorithms in a humanized manner for the first time.
- **A Diffusion Network Sampling and Estimation Framework** April 2012- Jun 2012
proposing a novel two-step (sampling/estimation) measurement framework by utilizing diffusion process characteristics to collect diffusion process data over online social networks.
- **Sampling over Diffusion Networks** Sep 2011- April 2012
Studying and classifying the current sampling approaches over diffusion networks to define the diffusion network sampling problem in order to evaluate introduced sampling approaches.
- **Network Reconstruction by Compressive Sensing.** Jan 2012- June 2012
Proposing a novel framework called CS-NetRec based on a newly emerged paradigm in sparse signal recovery called Compressive Sensing (CS) to uncover the missing edges of social networks.
- **Diffusion Network Extraction over Social Networks.** June 2010- Sep 2011
Proposing a new method called DNE to extract the diffusion networks by using the time-series data which outperforms the existing state of the art method in extraction accuracy and speed.
- **Optimizing Power Consumption and Reliability in WSNs.** Sep 2008- Sep 2009
Presenting a genetic algorithm on wireless sensor networks to optimize power consumption and data communication reliability together.

PROFESSIONAL ACTIVITIES

Program Committee

- International Conference on Web and Social Media (ICWSM) 2016, 2017

Reviewer

- Social Media+Society Journal 2016
- International Journal of Human-Computer Studies 2016
- Human Factors in Computing Systems Conference (CHI) 2016-2017
- Computer-Supported Cooperative Work and Social Computing Conference (CSCW) 2016-2017
- Behaviour & Information Technology Journal 2015
- International Conference on Web and Social Media (ICWSM) 2015
- Elsevier Computer Communications Journal 2015
- IEEE International Conference on Social Computing (SocialCom) 2011-2012

TEACHING EXPERIENCE

Teaching Assistant, Sharif University of Technology

- Stochastic Process Fall 2011
- Multimedia Networks Spring 2010
- Software Engineering Spring 2009
- Advanced Programming Fall 2008
- Introduction to Programming Fall 2007, Spring 2008

SKILLS

Computer Programming: C/C++, Java, C# , Matlab, Visual Basic, Pascal, LaTeX, Prolog, Assembly, Verilog, Bash and SQL

Web Programming and Design: HTML, XML (XSL, DTD, XQuery, RDF), CSS, Javascript and PHP (Familiar with Yii Framework)

Modeling Tools (UML): System Architect (SA), Enterprise Architecture (EA)

Network Simulators: OMNet++, NS2, OPNET