# Azadeh Nematzadeh

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http://auzadeh.github.ioh

**EDUCATION**

*PhD candidate, Complex Systems*
School of Informatics and Computing, expected Fall 2016.

*Master of Science, Information Security*
Amirkabir University, 2008.
Thesis: A Calculus for Trust Management in Semantic Web

*Bachelor of Science, Computer Engineering*
Shahid Beheshti University, 2005.
Thesis: Ranking Documents according to their Relevance with User Query

**PROFESSIONAL TRAINING**

Graduate student, Center for Complex Networks and Systems Research, School of Informatics and Computing, Bloomington, IN, USA.
Adviser: Alessandro Flammini, 2010-present.

Visiting graduate student researcher, FLAD Computational Biology Collaboratorium, Instituto Gulbenkian de Ciencia, Oeiras, Portugal, 2009-2010.

Graduate student, Information Security, School of Informatics and Computing, Bloomington, IN, USA. 2008-2009.

**SKILLS**

Proficient in Python, Pig, MySQL, LaTeX.
Experience with analyzing big data.
Data analysis with python, pig and R.
Experince with Spark, C++, C#, VB.Net. ASP.Net, Bash script, HTML, CCS, PHP, Perl, Prolog, UML.
*Languages*: Fluent in English and Persian / Familarity with French and Spanish

*Technical Skills*: Network Analysis, Big Data Analysis, Statistical Learning, Machine Learning, Data Mining, Text Mining, Experimental Design, Security Analysis of Systems, OOP, RUP, Software Analysis and Design, Database Design, Mapreduce, Hadoop, Experimental Design.

**MAJOR AWARD** *LinkedIn economic graph challenge*, One of eleven teams selected to study LinkedIn Data, 2015

**SELECTED PUBLICATIONS**

**Nematzadeh, Azadeh**, Giovanni Luca Ciampaglia, Alessandro Flammini, and Yong-Yeol Ahn, Information Overload in Group Communication: From Conversation to Cacophony in the Twitch Chat, under review

Misic, Bratislav, Richard F. Betzel, **Azadeh Nematzadeh**, Joaquin Goi, Alessandra Griffa, Patric Hagmann, Alessandro Flammini, Yong-Yeol Ahn, and Olaf Sporns. Cooperative and competitive spreading dynamics on the human connectome. No. EPFL-ARTICLE-207720. 2015.

**Nematzadeh, Azadeh**, Emilio Ferrara, Alessandro Flammini, and Yong-Yeol Ahn. Optimal network modularity for information diffusion. Physical review letters 113, no. 8 (2014): 088701.

**Nematzadeh, Azadeh**, and Omar Sosa-Tzec. Experience design framework for securing large scale information and communication systems. DRS 2014.

Loureno, Anlia, Michael Conover, Andrew Wong, **Azadeh Nematzadeh**, Fengxia Pan, Hagit Shatkay, and Luis Rocha. A linear classifier based on entity recognition tools and a statistical approach to method extraction in the protein-protein interaction literature. BMC bioinformatics 12, no. Suppl 8 (2011): S12.

Loureno, Anlia, Michael Conover, Andrew Wong, Fengxia Pan, Alaa Abi-Haidar, **Azadeh Nematzadeh**, Hagit Shatkay, and Luis M. Rocha. Testing extensive use of NER tools in article classification and a statistical approach for method interaction extraction in the protein-protein interaction literature. (2010).

**Nematzadeh, Azadeh**, and L. Jean Camp. Threat analysis of online health information system. In Proceedings of the 3rd International Conference on PErvasive Technologies Related to Assistive Environments, p. 31. ACM, 2010.

**Nematzadeh, Azadeh**, and Layla Pournajaf. Privacy concerns of semantic web. In Information Technology: New Generations, 2008. ITNG 2008. Fifth International Conference on, pp. 1272-1273. IEEE, 2008.

Jafarpour, Borna, **Azadeh Nematzadeh**, Vahid Kazempour, and Babak Sadeghian. A cheating model for cellular automata-based secret sharing schemes. configurations 1(2007):0.

**Nematzadeh, Azadeh**, Vahid Kazempour, Pooya Jaferian, Pejman Salehi, and Ahmad Abdollahzadeh. Modeling architectural access control with UML 2.0. IPM, Tehran, Iran (2007).

Shamsfard, Mehrnoush, **Azadeh Nematzadeh**, and Sarah Motiee. Orank: An ontology based system for ranking documents. International Journal of Computer Science 1, no. 3 (2006): 225-231.

**PRESENTED POSTERS**

**Azadeh Nematzadeh** (2014), "Optimal network modularity for fast global information diffusion". Network Frontier Workshop, December 2015.

**Azadeh Nematzadeh** (2014), "Optimal modularity for information diffusion". NetSci 2014.

**Azadeh Nematzadeh** (2013), "Effect of network community in information diffusion". Network Frontier Workshop, December 2013.

**Azadeh Nematzadeh** and Norbert Chan(2012), "How do issue frames evolve in political discourse? A computational analysis of the presence and magnitude of shifts between policy frames". PolMeth XXIX. 29th Annual Summer Meeting Society for Political Methodology. July 18.21.

**Azadeh Nematzadeh** and Shirin Nilizadeh (2011), "Classification approach toward craigslist scam detection". Graduate cohort workshop, Boston.

**PUBLICATIONS IN PROGRESS**

**Azadeh Nematzadeh**, Giovanni Luca Ciampaglia, Fil Menczer, Alessandro Flammini, Consumer Choices in a Connected World.

**Azadeh Nematzadeh**, Ian Wood, Jaehyuk Park, Mike Conover, Yizhi Jing, Young-Yeol Ahn (Authors are in an alphebetical order) Revealing the Hierarchical Structure of the Global Labor Flow Network.

**Azadeh Nematzadeh**, Soheil Jazayeri, Peter M. Todd, and Yong-Yeol Ahn, Where to Eat or What to Eat? Examining Urban Food Exploration through Yelp Reviews.

**Azadeh Nematzadeh**, Alessandro Flammini, and Yong-Yeol Ahn, Lifetime of information contagion and optimal clustering in network.

**RECENT PROFESSIONAL EXPERIENCE**

*Research Assistant*, Under supervision of Alessandro Flammini, Center for complex networks

and systems research, Fall 2013-Spring 2015.

*Research Assistant*, Under supervision of Luis Rocha, Instituto gulbenkian de science, Sept 2009-Sept 2010.

*Research Assistant*, Under supervision of Jean Camp, School of Informatics, Summer 2009 and Fall 2010.

*Solution Engineer*, Nokia Siemens Network, 2007-2008.
Created an engineering solution for mobile networks; system installation, integration, and maintenance.

*Software Engineer*, Niro Research Institute, 2006 .
Worked as a software analyst, designer, and developer.

**RECENT TEACHING EXPERIENCE**

*Lecturer*
Multimedia Systems, Shahid Rajaee University, Tehran, Iran, Spring 2007.

*Associate Instructor*
Math Foundation of Informatics, Indiana University, Spring-Summer 2016.

Information Representation, Indiana University, Spring 2011- Spring 2013,

Organizational Informatics of Security, Indiana University, Spring 2009,

Analytical Foundation of Security, Indiana University, Fall 2009,

Artificial Intelligence, Shahid Beheshti University, Spring 2004 - Fall 2006,

Principles of Computer and Programming, Shahid Beheshti University, Fall 2003.

**ACADEMIC SERVICES & VOLUNTEER WORKS**

*Reviewer of* Journal of the Royal Society Interface (2015), IC2S2 (2015), Scientific Reports (2014-2015), and Web of Science Conference (2014).

*Openhatch workshop* , Mentor, Fall. 2013-2014.

*Complex System reading group*, Organized the complex system reading group, Indiana University, 2015-2016.

*Complex System PhD student meeting*, member of the organizing committee, Indiana University, 2011-2012.

*NCWIT Award* , Review and score applications for the NCWIT Award for Aspirations in Computing, 2011.

*IT association*, One of the main organizers of the IT group at Shahid Beheshti University, Activities of this group included presenting lectures about some different aspects of IT (Data Mining, Intelligent Agents, eCommerce, ITS), 2004.

*Robocup instructor*, Instructor of two Robocup-leagues preparation classes for pre-selected high-school students, 2006.

**OTHER AWARDS**

*CCS2015*, Travel grant to participate in the CCS 2015 conference.

*Computational Social Science Summit*, Travel grant for the Summit 2015 conference.

*Grad-Cohort award*, Graduate cohort workshop, Boston, 2011.

*NSF scholar award*, Doctoral consortium of PETRA conference. Greece, 2010.

*WISE 2010*, Summer school sponsored by the Team for Research in Ubiquitous Secure Technology (TRUST), CMU, 2010.

*WISE 2009*, Summer school sponsored by the Team for Research in Ubiquitous Secure Technology (TRUST), Berkeley University, 2009.