

# FARIBA KARIMI

## GESIS - Leibniz Institute for social sciences

Department of Computational Social Sciences  
Unter Sachsenhausen 6-8  
50667 Cologne, Germany  
Tel: +49 221 47694 239  
E-mail: fariba.karimi@gesis.org

## RESEARCH INTERESTS

Computational Social Science, Data Science, Network Theory and Dynamics, Algorithmic Biases and Inequality

## CURRENT POSITION

Mar. 2015 - current      Postdoctoral researcher, Department of Computational Social Sciences, GESIS

## EDUCATION

Feb. 2011 - Feb. 2015      PhD in Physics with specialization in Computational Science, Umeå University  
Thesis title: Tightly Knit: Spreading Processes in Empirical Temporal Networks,  
supervisors: Petter Holme and Martin Rosvall  
Aug. 2009 - Feb. 2011      M.Sc. in Physics, Lund University  
May 2005 - May 2007      M.Sc. in Physics, Shahid Beheshti University

## JOURNAL PUBLICATIONS

- Karimi, F., M. Génois, C. Wagner, P. Singer, and M. Strohmaier (2018). Homophily influences ranking of minorities in social networks. *Nature Scientific Reports*, [OA].
- Karimi, F., P. Mayr, and F. Momeni (2018). Analyzing the network structure and gender differences among the members of the networked knowledge organization systems community. *International Journal of Digital Library*, [OA].
- Jadidi, M., F. Karimi, H. Lietz, and C. Wagner (2017). Gender disparities in science? dropout, productivity, collaborations and success of male and female computer scientists. *Advances in Complex Systems*, 1750011, [OA].
- Kunegis, J., F. Karimi, and S. Jun (2017). The problem of action at a distance in networks and the emergence of preferential attachment from triadic closure. *Journal of Interdisciplinary Methodologies and Issues in Science 2*, [OA].
- Samoilenko, A., F. Karimi, D. Edler, J. Kunegis, and M. Strohmaier (2016). Linguistic neighbourhoods: explaining cultural borders on wikipedia through multilingual co-editing activity. *EPJ Data Science 5*(9), [OA].
- Karimi, F. and M. Raddant (2016). Cascades in real interbank markets. *Computational Economics 47*(1), 49–66, [OA].
- Karimi, F., L. Bohlin, A. Samoilenko, M. Rosvall, and A. Lancichinetti (2015). Mapping bilateral information interests using the activity of wikipedia editors. *Palgrave Communications*, [OA].

Sircova, A., F. Karimi, E. N. Osin, S. Lee, P. Holme, and D. Strömbom (2015). Simulating irrational human behavior to prevent resource depletion. *PloS one* 10(3), e0117612, [OA].

Karimi, F., V. C. Ramenzoni, and P. Holme (2014). Structural differences between open and direct communication in an online community. *Physica A: Statistical Mechanics and its Applications* 414, 263–273, [OA].

Karimi, F. and P. Holme (2013a). A temporal network version of watts cascade model. In *Temporal Networks*, pp. 315–329. Springer Berlin Heidelberg.

Karimi, F. and P. Holme (2013b). Threshold model of cascades in empirical temporal networks. *Physica A: Statistical Mechanics and its Applications* 392(16), 3476–3483, [OA].

## SUBMITTED PAPERS

F. Karimi, Lee, E., H.-H. Jo, M. Strohmaier, and C. Wagner (2017). Homophily explains perception biases in social networks. *Under review for Nature Human Behavior*.

## CONFERENCE PUBLICATIONS

Espín-Noboa, L., C. Wagner, F. Karimi, and K. Lerman (2018). Towards quantifying sampling bias in network inference. *WWW Conference*, [OA].

Sun, J., S. Staab, and F. Karimi (2018). Decay of relevance in exponentially growing networks. *WebSci Conference*, [OA].

Claudia Wagner, Olga Zagovora, Tatiana Sennikova, and Fariba Karimi (2018). Collective Attention towards Scientists and Research Topics. *WebSci Conference*, [OA].

Wagner, C., P. Singer, F. Karimi, J. Pfeffer, and M. Strohmaier (2017). Sampling from social networks with attributes. In *Proceedings of the 26th International Conference on World Wide Web*, pp. 1181–1190. International World Wide Web Conference, [OA].

Karimi, F., C. Wagner, F. Lemmerich, M. Jadidi, and M. Strohmaier (2016). Inferring gender from names on the web: A comparative evaluation of gender detection methods. In *Proceedings of the 25th International Conference Companion on World Wide Web*, pp. 53–54. International World Wide Web Conference, [OA].

Samoilenko, A., F. Karimi, J. Kunegis, D. Edler, and M. Strohmaier (2015). Linguistic influence patterns within the global network of wikipedia language editions. In *Proceedings of the ACM Web Science Conference*, pp. 54. ACM.

## SELECTED RESEARCH VISITS

August 2017	Integrated Science Laboratory (IceLab), Umea Uni.
May 2017	Institute of Theoretical Physics, Empirical Networks and Neurodynamic, TU Berlin
October 2016	Center for complex systems , University of Namur
October 2013	Department of Energy Science, Sunkyunkwan University
March 2013	Institute for mathematic and computer science, Danish University of Technology
May 2012	Donders Institute for Cognition, Nijmegen

## **TEACHING**

Network theory and dynamic systems, 2016, 2017, University of Koblenz-Landau, Master Program lecture  
Advanced Topics in Network Science, 2016, University of Koblenz-Landau, Master Program lecture  
Computational Social Science, 2016, 2017, University of Koblenz-Landau, Guest lecturer  
Supervision of 2 Master theses and 1 student project at the University of Koblenz-Landau

## **ACADEMIC SERVICE**

Evaluator for the Swiss National Science Foundation (2016)  
Editor for the book 'Dynamics on and of Complex Networks' (forthcoming 2018) Co-organizer of Satellite on Dynamics On and Of Networks at NetSci conference (2017) Co-organizer of Satellite on Dynamics On and Of Networks at the conference on complex systems (2016) Organizer of the workshop on the application of network theory on social sciences at GESIS (2015)

### **Program Committee**

PC of the International Conference on Web and Social Media, ICWSM (2016,2017)  
PC of the European Symposium on Societal Challenges in Computational Social Science (2017)  
PC of 9th International Conference on Complex Networks (2017)  
PC of 9th international Conference on Social Informatics (2017)  
PC of Workshop on Social Influence (2016,2017)  
PC of the 3rd Computational Social Science Winter Symposium (2016)

### **Journal reviewer**

Reviewer of the Nature Scientific Reports  
Reviewer of PloSOne  
Reviewer of Nature Palgrave Communication  
Reviewer of the journal of Physica A  
Reviewer of the journal of Social network analysis and mining

## **HONORS AND AWARDS**

Best poster award at the NetSciX conference, Poland (2016)  
Best poster award at the NetSci conference, Indianapolis (2017)  
Best presentation award at the Korean Physical Society Conference (2017)  
Master thesis co-supervised together with Claudia Wagner was nominated for the GOR thesis award (2016)  
Wallenberg travel grant (2014)  
Kempe travel grant (2014)  
Palantir scholarship (2012)

## INVITED TALKS, CONFERENCES, WORKSHOPS

July 2018	BIGSSS Summer School on Computational Social Science, Jacobs Uni. (invited expert)
June 2018	NetSci Conference, Paris. (invited talk and contributed talk)
August 2017	Integrated Science Laboratory (IceLab), Umea Uni. (invited talk)
July 2017	Interdisciplinary Workshop on Opinion Dynamics and Collective Decision , Jacobs Uni.(talk)
May 2017	Institute of Theoretical Physics, Empirical Networks and Neurodynamic, TU Berlin (invited talk)
June 2017	International Conference of Computational Social Science (IC2S2), Cologne (talk and poster)
March 2017	Max Planck Institute for Evolutionary Biology, Plon (invited talk)
October 2016	University of Namur, Namur (invited talk)
November 2016	3rd GESIS Computational Social Science Winter Symposium, Cologne (poster)
September 2016	Complex System Conference, Amsterdam (talk)
July 2016	Statistical Physics of Financial and Economic Networks, Lyon (talk)
March 2016	DPG meeting- Physics of socio-economic systems, Regensburg (talk)
February 2016	Networking workshop in Computational Social Sciences, Cologne
June 2015	International Conference of Computational Social Science (IC2S2), Helsinki (talk)
March 2014	European Social Simulation Association workshop, Ruhr University, Bochum (talk)
April 2013	Information and predictability in social interactions workshop, Arhus (talk)
September 2014	European conference on complex systems, Lucca (talk and poster)
June 2014	Network Science Conference (NetSci), Berkeley (poster)
April 2014	North Atlantic network summit, Reykjavik (talk)
October 2013	KAIST University, Daejeon, South Korea (invited talk)
September 2013	European conference on complex systems, Barcelona (talk)
May 2013	Network approaches for interbank markets, Castellon (talk)
April 2013	Interactive Minds Center, Aarhus (talk)
November 2012	Institute for mathematic and computer science, DTU, Lyngby (talk)
October 2012	ISI foundation , Turin (invited talk)
June 2012	NetSci, The International School and Conference on Network Science Evanston, IL (poster)
November 2011	Nordic Network for Network Science kick off, Stocllholm (talk)
June 2011	NetSci, The International School and Conference on Network Science, Budapest (poster)
March 2011	workshop on applications on network theory, Stockholm (talk)