Dr. Fariba Karimi

Curriculum Vitae

GESIS - Leibniz Institute for social sciences
Department of Computational Social Sciences
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Current position

2015–current **Postdoctoral researcher, Department of Computational Social Sciences**, *GESIS*, Germany.

Dec.2017–Sep.2018 **Maternity leave**.

Education

2011–2015 **PhD in Computational Science and Engineering with specialization in Physics**, *Umea University*, Sweden.

2009–2011 **M.Sc. in Physics**, *Lund University*, Sweden.

2005–2007 **M.Sc. in Physics**, *Shahid Beheshti University*, Iran.

Publications

My name is in **bold**. The names of students or group members working under my supervision for that publication are underlined.

[1] Ntoutsi, Eirini and Fafalios, Pavlos and Gadiraju, Ujwal and Iosifidis, Vasileios and Nejdl, Wolfgang and Vidal, Maria-Esther and Ruggieri, Salvatore and Turini, Franco and Papadopoulos, Symeon and Krasanakis, Emmanouil and others (2020). Bias in data-driven artificial intelligence systems - An introductory survey. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*.

[2] Lee, E.*, **F. Karimi***, C. Wagner, H.-H. Jo, M. Strohmaier, and M. Galesic (2019). Homophily and group size explain perception biases in social networks. *Nature Human Behavior*. *equal

contribution..

[3] Kohne, J., Gallagher, N., Kirgil, Z.M., Paolillo, R., Padmos, L., and **F. Karimi**(2019). Clashing Norms - The Role of Network Structure in Conflicting Norms. *Computational Conflict Research (forthcoming)*.

[4] **F. Karimi**, M. Génois, C. Wagner, P. Singer, and M. Strohmaier (2018). Homophily influences ranking of minorities in social networks. *Nature Scientific Reports*, [OA].

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

[6] **F. Karimi**, 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].

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

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

[9] 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].

[10] 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].v

[11] 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].

[12] 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].

[13] **F. Karimi**, 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].

[14] **F. Karimi** and M. Raddant (2016). Cascades in real interbank markets. *Computational Economics 47*(1), 49–66, [OA].

[15] **F. Karimi**, L. Bohlin, A. Samoilenko, M. Rosvall, and A. Lancichinetti (2015). Mapping bilateral information interests using the activity of wikipedia editors. *Palgrave Communications*, [OA].

[16] 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].

[17] **F. Karimi**, 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].

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

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

[20] M. Oliveira, **F. Karimi**, M. Zens, J. Schaible, M. Genois, M. Strohmaier(2019). Mixing dynamics and group imbalance lead todegree inequality in face-to-face interactions. *under preparation for Science Advances*.

[21] L.Espín-Noboa, **F. Karimi**, B. Ribeiro, K. Lerman, C. Wagner(2019). Errors in inferring Attributes from Social Networks with Minorities. *under submission for ICWSM*.

Total Google Scholar citations: 300, h-index $= 10$

PhD Thesis

Title	*Tightly Knit: Spreading Processes in Empirical Temporal Networks*
Supervisors	Prof. Petter Holme & Prof. Martin Rosvall

Selected research visits and international collaborations

May 2019	Department of Computer Science, University of Louvain (1 week)
October 2018	Graduate School of Business Administration, Keio University, Japan (1 month)
August 2017	Integrated Science Laboratory (IceLab), Umea Uni. (1 week)
May 2017	Institute of Theoretical Physics, Empirical Networks and Neurodynamic, TU Berlin
October 2016	Center for complex systems , University of Namur (3 days)
October 2013	Department of Energy Science, Sunkynkwan University (3 weeks)
March 2013	Institute for mathematics and computer science, Danish University of Technology (3 weeks)
May 2012	Donders Institute for Cognition, Nijmegan (1 week)

Teaching and services

2019	**Introduction to Social Network Science with Python**, *GESIS Training School*.
2016,2017	**Network theory and dynamic systems**, *University of Koblenz-Landau, Graduate course*.
2016	**Advanced Topics in Network Science**, *University of Koblenz-Landau, Graduate course*.
2016,2017	**Computational Social Science**, *University of Koblenz-Landau, guest lecturer*.
2017	**Data science**, *University of Koblenz-Landau, guest lecturer*.

Supervision

All the master student supervisions are associated with the Department of Computer Science, University of Koblenz-Landau.

Doctoral Students

Mohsen Jadidi (with C. Wagner), Lisette Espin-Noboa (with C. Wagner), Ann Samoilenko (with M. Strohmaier)

Master Students

2019 Hyunsik Kong

Analyzing the career path and citation patterns of men and women in physics

2018 Sousan Homaeipour

Exploring citation patterns of male and female scholars in Physics

2016 Tatiana Sennikova

Attention Dynamics of Scientists on the Web

Student Projects

2019 Sousan Homaeipour

Exploring collaboration patterns of male and female scholars in Physics

2018 Tara Morovatdar

Extracting and analyzing the artist graph on Spotify

Grants

2019 Marie Curie European Training Network on "AI without Bias", I will supervise 1 PhD student starting from August 2020.

Honors and awards

2019 Tenure-track Assistant Professorship offer from Central European University, Department of Network and Data Science (*declined*)

2019 Short-listed for Delft Technology fellowship

2019 Short-listed for MacGillavry fellowship for talented female researchers, University of Amsterdam

2017 Best poster award at the NetSci conference, Indianapolis

2017 Best presentation award at the Korean Physical Society Conference

2016 Best poster award at the NetSciX conference, Poland

2016 Master thesis (supervised by me) was nominated for the GOR thesis award

2014 awarded two Swedish travel grants

Academic service

2019 Co-editor of the book "Dynamics on and of Complex Network"

2017 Co-organizer of Satellite on Dynamics On and Of Networks at NetSci conference

2016 Co-organizer of Satellite on Dynamics On and Of Networks at the Conference on Complex Systems

2016 Evaluator for the Swiss National Science Foundation

2015 Organizer of the workshop on the application of network theory on social sciences at GESIS

Program Committee

PC of NetSci Conference (2020)
PC of NetSciX Conference (2020)
PC of the international Conference on Social Informatics (socinfo) (2020)
Senior PC of the international Conference on Social Informatics (socinfo) (2019)
PC of the 11th ACM Conference on Web Science (2019)
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 Nature Scientific Reports
Reviewer of Science Advances
Reviewer of EPJ Data Science
Reviewer of Royal Society
Reviewer of Applied Network Science
Reviewer of PloSOne
Reviewer of Nature Palgrave Communication
Reviewer of Physica A
Reviewer of Social Network Analysis and Mining

Membership

Council member of Complex Systems Society
Member of German Physical Society DPG

Selected invited talks, conferences, workshops

March 2020 Santa Fe Institute (invited talk)
February 2020 Complexity Science Hub, Vienna (invited talk)
February 2020 Department of Computer Science, TU Delft (invited talk)
November 2019 Workshop on Social Networks and Media, Fakultätentags Informatik, Hamburg (invited talk)
July 2019 Summer Institute in Computational Social Science, Bamberg (invited lecture)
June 2019 Indo-German workshop on Information Retrieval and Scientometrics, Cologne (invited talk)
May 2019 Department of Computer Science, University of Louvain (invited talk)
May 2019 DataBeers Brussels (invited talk)
December 2018 Complex Networks Conference, Uni. of Cambridge (lightening talk)
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)
September 2014	European conference on complex systems, Lucca (talk and poster)
April 2013	Information and predictability in social interactions workshop, Arhus (talk)

Media outreach

1. "Our journey through a personal quest: How do social networks shape our perceptions?", Nat. Hum. Behv. (2019)
2. "It is not you, it's the network", Santa Fe Institute (2019)
3. I have been interviewed by srslyreally podcast about homophily and minorities (2019)
4. Article in Fast Company entitled "This basic fact about social networks disadvantages minorities" (2018)
5. I have been interviewed by local Swedish newspaper about Wikipedia and national interests (2015)
6. Phys.org, "Patterns in large data show how information travels"(2015)