

**RESEARCH  
INTERESTS**

Machine Learning over Graphs, *Graph Representation Learning*  
Nonparametric Bayesian Models, *over Complex Networks*  
Deep Neural Networks, *Reinforcement Learning*  
Social Network Analysis, *Recommender Systems*

**EDUCATION**

*PhD Candidate*

Computer Science, Faculty of Informatics,  
Technical University of Vienna (TU Wien), Vienna, Austria,  
October 2016–2019(expected)

*Master of Science*

Computer Science, Faculty of Computer Engineering,  
Sharif University of Technology (SUT), Tehran, Iran,  
2010-2012

*Bachelor of Science*

Computer Science, Faculty of Computer Engineering,  
Sharif University of Technology (SUT), Tehran, Iran,  
2005-2010

**PUBLICATIONS**

- *A Nonparametric Bayesian Model for Sparse Temporal Multigraphs*, E. Ghalebi, H. Mahyar, R. Grosu, G.W. Taylor, S.A. Williamson. **arXiv 1910.05098**
- *Sequential Edge-Clustering in Temporal Multigraphs*, E. Ghalebi, H. Mahyar, R. Grosu, G.W. Taylor, S.A. Williamson. **Graph Representation Workshop of NeurIPS 2019**, Vancouver, Canada.
- *Dynamic Network Model from Partial Observations*, E. Ghalebi, B. Mirzasoleiman, R. Grosu, J. Leskovec. Accepted to 32nd Conference on Neural Information Processing Systems (**NeurIPS 2018**) (**Spotlight Presentation**).
- *Identification of Central Nodes for Information Flow in Social Networks using Compressive Sensing*, H. Mahyar, R. Hasheminezhad, E. Ghalebi, A. Nazemian, R. Grosu, A. Movaghar, and H. R. Rabiee, in *Social Network Analysis and Mining (SNAM 2018)*, vol. 8(1):33, December 2018. DOI: 10.1007/s13278-018-0506-1.
- *Unsupervised Wafermap Patterns Clustering via Variational Autoencoders*, P. Tullala, H. Mahyar, E. Ghalebi, and R. Grosu, in *Proc The International Joint Conference on Neural Networks (IJCNN 2018)*, Rio de Janeiro, Brazil.
- *Compressive Sensing of High Betweenness Centrality Nodes in Networks*, H. Mahyar, R. Hasheminezhad, E. Ghalebi, A. Nazemian, R. Grosu, A. Movaghar, and H. R. Rabiee, in **Physica A: Statistical Mechanics and its Applications**, vol. 497, pp. 166-184, May 2018. DOI: 10.1016/j.physa.2017.12.145.
- *Compressed Sensing in Cyber Physical Social Systems*, R. Grosu, E. Ghalebi, A. Movaghar, and H. Mahyar, in *Proc of Edward A. Lee Festschrift Symposium Principles of Modeling*, Berkeley, USA, October 2017, "Festschrift" LNCS series.
- *The Bottlenecks in Biological Networks*, H. Mahyar\*, E. Ghalebi\*, H. R. Rabiee, and Radu Grosu, in *Proc of the 34th International Conference on Machine Learning (ICML 2017)*, Computational Biology Workshop, Sydney, Australia, August 2017. (\*Authors contributed equally)
- *Compressive Sampling for Sparse Recovery in Networks*, E. Ghalebi\*, H. Mahyar\*, R. Grosu, and H. R. Rabiee, in *Proc of the 23rd ACM SIGKDD Conference*

on Knowledge Discovery and Data Mining (**KDD 2017**), 13th International Workshop on Mining and Learning with Graphs, Halifax, Nova Scotia, Canada, August 2017. (\*Authors contributed equally)

- *HellRank: A Hellinger-based Centrality Measure for Bipartite Social Networks*, S. M. Taheri, H. Mahyar, M. Firouzi, E. Ghalebi, R. Grosu, and A. Movaghar, in Social Network Analysis and Mining (**SNAM 2017**), vol. 7(1), May 2017. DOI: 10.1007/s13278-017-0440-7.
- *Extracting Implicit Social Relation for Social Recommendation Techniques in User Rating Prediction*, S. Mohammad Taheri, Hamidreza Mahyar, Mohammad Firouzi, Elahe Ghalebi, Radu Grosu, and Ali Movaghar, in Proc of the 26th International World Wide Web Conference (**WWW 2017**), Social Computing Workshop: Spatial Social Behavior Analytics on the Web, Perth, Australia, April 2017, pp. 1343-1351.
- *A Low-cost Sparse Recovery Framework for Weighted Networks under Compressive Sensing*, H. Mahyar, H. R. Rabiee, A. Movaghar, R. Hasheminezhad, E. Ghalebi, and A. Nazemian, in Proc IEEE International Conference on Social Computing and Networking (**SocialCom 2015**), Chengdu, China, December 2015.
- *CS-ComDet: A Compressive Sensing Approach for Inter-Community Detection in Social Networks*, H. Mahyar, H. R. Rabiee, A. Movaghar, E. Ghalebi, and A. Nazemian, in Proc IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (**ASONAM**), Paris, France, August 2015, pp. 89-96.

**EXPERIENCE**     *Research Intern*     Summer 2019  
 Vector Institute, Toronto, Canada,  
 Mentor: Graham Taylor.

*Research Intern*     Fall 2018  
 Max-Planck Institute for Software Systems, Kaiserslautern, Germany,  
 Mentor: Manuel Gomez Rodriguez.

*Teaching Assistant*  
 Cyber-Physical Systems Engineering: Logical Foundations     2016–2018  
 Data Communication and Computer Networks, Operating Systems     2013–2015  
 Data Structure and Algorithm     2013–2014  
 Multimedia Networks     2012

*Graduate Research Assistant*  
 Cyber-physical group at TU Wien     2016–2019  
 Performance and Dependability Laboratory (PDL) at SUT     2013–2016  
 Value Added Services Laboratory (VASLAB) at SUT     2012-2013

*Software Developer*     2013–2016  
 Department of Information Systems at Mahan Airline, Tehran, Iran

**COMPUTER SKILLS**     *Programming Languages:* PYTHON, JAVA, MATLAB, SQL, L<sup>A</sup>T<sub>E</sub>X  
*Operating Systems:* Unix, Windows  
*Language:* Persian and English, basic in German

**HONORS and AWARDS**     11th Rank, National Graduate Entrance Exam in Computer Engineering field, Tehran, Iran, Spring 2010.  
 84th Rank, Nationwide University Entrance Exam in Engineering and Applied Mathematics, Summer 2005, Among over 200,000 High School Students of 2nd Region.

Awarded Student Travel Scholarship, Neural Information Processing System Conference, Montreal, Canada, December 2018.

Awarded Student Travel Scholarship, Women in Machine Learning Workshop, Montreal, Canada, December 2018.