Ali Khodadadi

Curriculum Vitae

Education

2013–2019 **Ph.D in Computer Engineering**, *Sharif University of Technology*, Tehran, Iran, *GPA − 19.22/20*.

Thesis Title: *"Analysis and Modeling of User Behavior over Social Media"*.

Supervisor: Prof. Hamid Reza Rabiee

2010–2012 **M.Sc. in Computer Engineering**, *Sharif University of Technology*, Tehran, Iran, *GPA − 18.66/20*.

Thesis Title: *"Sampling from Complex Networks Considering Activity Level of Nodes"*.

Supervisor: Dr. Mohammad T. Manzouri and Prof. Hamid R. Rabiee

2006–2010 **B.Sc. in Computer Engineering**, *Sharif University of Technology*, Tehran, Iran, *GPA − 17.55/20*.

Thesis Title: *"Measurement and Analysis of CE Network Traffic Using SNORT IDS"*.

Supervisor: Dr. Amir H. Jahangir

Research Interests

Theory Probabilistic machine learning, Bayesian Inference, Temporal Point Processes, Deep Neural Networks.

Practice Applying modern machine learning tools to model and predict future user actions in online services in order to provide them the best time-sensitive recommendations.

Awards & Honors

2010 3rd Rank, in Cumulative GPA (**17.55/20**) among more than 35 B.Sc. IT Engineering students of the department, Sharif University of Technology

2010 Awarded Fellowship of Exceptional Talent for the M.Sc. Program in Information Technology Engineering from Computer Engineering Department of Sharif University of Technology

| 2006 | Achieved the $400th$ rank in the National University Entrance Examination for the B.Sc. degree among more than 500,000 participants |

Experience

Work

2019–present	**Lead Data Scientist**, *Tapsell*, Tehran, Iran, In Tapsell, I am the manager of a team called Brain. This team is responsible for all AI based tasks in company from CTR prediction to Realtime Bidding to Fraud detection. Some of the task I am involved:.

- Design and Implementation of Fraud Detection System
- Design and Implementation of CafeBazaar SearchAds Bidder of Tapsell
- Design the pipeline and a system for fast AB testing of ML algorithms
- Managing a team of scientists and developers to handle and prioritize the tasks

2017–2019	**ML Scientist**, *Tapsell*, Tehran, Iran, In Tapsell, I am responsible of realtime bidding system in which we try to predict the conversion rate of campaigns for users. I was involved in all aspects of the system, from design to implementation and keeping the system running in production. To be more specific I was involved in:.

- Design and implementation of data pipeline
- Design and implementation of user profiles
- Design and implementation of bidding system
- Improve response time of system by adding different layers of caching

2014–2016	**Researcher**, *ICT Innovation Center*, Tehran, Iran. Working on diffusion of information, products and rumours over social network.
2013–2014	**3G VAS Consultant**, *Value Added Service Lab*, Tehran, Iran. Worked as a technical consultant for value added services in 3G moblie networks. I identified potential services for PSTN telephone and agricultural services.
2011	**Executive Member of 17th National CSI Computer Conference**, *Sharif University of Technology, Computer Engineering department*, Tehran, Iran. Worked as a technical member.

Teaching

Fall 2016	**Teaching Assistant of Stochastic Processes Course**, SHARIF UNIVERSITY OF TECHNOLOGY, Gradate Course, (Prof. Hamid R. Rabiee).
Summer 2015	**Teaching Network Laboratory Course**, SHARIF UNIVERSITY OF TECHNOLOGY, Undergraduate Course.
Spring 2015	**Teaching Assistant of Multimedia Course**, SHARIF UNIVERSITY OF TECHNOLOGY, Undergraduate Course, (Prof. Hamid R. Rabiee).
Spring 2015	**Teaching Assistant of Statistical Learning Course**, SHARIF UNIVERSITY OF TECHNOLOGY, Graduate Course, (Prof. Hamid R. Rabiee).
Fall 2014	**Teaching Assistant of Stochastic Processes Course**, SHARIF UNIVERSITY OF TECHNOLOGY, Graduate Course, (Prof. Hamid R. Rabiee).
Summer 2014	**Teaching Network Laboratory Course**, SHARIF UNIVERSITY OF TECHNOLOGY, Undergraduate Course.

Spring 2014	**Teaching Network Laboratory Course**, Sharif University of Technology, Undergraduate Course.
Spring 2014	**Teaching Assistant of Statistical Pattern Recognition Course**, Sharif University of Technology, Graduate Course, (Prof. Hamid R. Rabiee).
Spring 2012	**Teaching Assistant of Multimedia Networks Course**, Sharif University of Technology, Graduate Course, (Prof. Hamid R. Rabiee).

Publications

Published   **A. Khodadadi, S. A. Hosseini, A. Pajouheshgar, F. Mansouri, H. R. Rabiee**, *"ChOracle: A Unified Statistical Framework for Churn Prediction"*, Transactions on Knowledge and Data Engineering (TKDE), IEEE, 2020.

A. Khodadadi, A. Hosseini, E. Tavakoli, H. R. Rabiee, *"Continuous-Time User Modeling in Presence of Badges: A Probabilistic Approach"*, Transactions on Knowledge Discovery from Data journaz, ACM, vol. 20, issue 3, April 2018.

S. A. Hosseini, A. Khodadadi, K. Alizadeh, A. Arabzadeh, M. Farajtabar, H. Zha, H. R. Rabiee, *"Recurrent Poisson Factorization For Temporal Recommendation"*, Transactions on Knowledge and Data Engineering (TKDE), IEEE, 2018.

M. Ramezani, H. R. Rabiee, A. Khodadadi, *"Community Detection Using Diffusion Information"*, Transactions on Knowledge Discovery from Data journal, ACM, vol. 12, issue 2, March 2018.

A. Hosseini, Keivan Alizadeh, A. Khodadadi, Ali Arabzadeh, Mehrdad Farajtabar, Hongyuan Zha, H. R. Rabiee, *"Recurrent poisson factorization for temporal recommendation"*, 23rd SIGKDD Conference on Knowledge Discovery and Data Mining, 2017.

A. Hosseini, A. Khodadadi, H. R. Rabiee, *"HNP3: A Hierarchical Nonparametric Point Process for Modelling Content Diffusion Over Social Media"*, IEEE International Conference on Data Mining (ICDM), 2017.

A. Zarezade, A. Khodadadi, M. Farajtabar, H. R. Rabiee, L. Song, and H. Zha, *"Correlated Cascades: Compete or Cooperate"*, Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence, 2017.

S. Sajadmanesh, H. R. Rabiee, A. Khodadadi, *"Predicting Anchor Links between Heterogeneous Social Networks"*, International Conference on Advances in Social Networks Analysis and Mining (ASONAM), San Francisco, CA, USA, IEEE/ACM, 08/2016.

A. Fattaholmanan, H. R. Rabiee, P. Siyari, A. Soltani-Farani, A. Khodadadi, *"A Peer to Peer Compressive Sensing Framework for Network Monitoring"*, Communications Letters, IEEE, vol.19, no.1, pp.38,41, Jan. 2015.

Ph.D. Thesis   **A. Khodadadi**, *"User Behaviour Modeling over Social Media"*, Ph.D. Thesis, Department of Computer Engineering, Sharif University of Technology, 2019 (In Persian).

M.Sc. Thesis	**A. Khodadadi**, *"Sampling from Complex Networks Considering Activity Level of Nodes"*, Information Technology M.Sc. Thesis, Department of Computer Engineering, Sharif University of Technology, 2012 (In Persian).
B.Sc. Thesis	**A. Khodadadi**, *"Measurement and Analysis of CE Traffic Using SNORT IDS"*, Information Technology B.Sc. Thesis, Department of Computer Engineering, Sharif University of Technology, 2010 (In Persian).

Computer skills

Programming Languages	Java, Kotlin, Python, C, C++
Databases	Elasticsearch, MongoDB, Cassandra, MySQL
Caching	Redis, Spring Guava (Cafeine)
IDEs and Version Control	Intellij IDEA, PyCharm IDEA, Eclipse IDEA, Git
Programming Frameworks	Spring Framework (Boot, Cloud, Data)
Message Queues	Apache Kafka, RabbitMQ
Tools	Tensorflow, MATLAB
CI/CD and Container Orchestration	Jenkins, Kubernetes
ML Platforms	H2O, Scikit-learn
Typesetting	LaTeX, MS Office, Open Office
Operating System	Linux, Microsoft Windows
Familiar with	TensorFlow, Apache Spark

Languages

Persian	**Native**
English	**Fluent**
Arabic	**Basic**