

In the name of God



Tarbiat Modares University

Faculty of Electrical and Computer Engineering

Mehdy Roayaei Ardakany

Assistant Professor, Computer Engineering

Phone: +982182883939

Email: mroayaei@modares.ac.ir

Iran, Tehran, Tarbiat Modares University



Educational History

Degree	Major	University	Start	Finish
B.S.	Software engineering	AUT	2004	2008
B.S.	Information Technology	AUT	2006	2010
M.S.	Software engineering	AUT	2008	2010
Ph.D.	Software engineering	AUT	2010	2015

Research Interest:

- Reinforcement Learning
- Artificial Intelligence
- Social Network Analysis
- Algorithms
- Data Science

Review of Journals

- Information sciences
- Neural Computing and Applications
- Super Computing
- IGI Global Book Chapter Peer Reviews
- Tabriz Journal of Electrical Engineering
- Computer Society of Iran
- Transactions on Signal and Information Processing over networks
- Signal and Data Processing
- Scientia Iranica
- International Journal of Data Analysis Techniques and Strategies
- SN Applied Sciences

Teaching Experiences

- **Reinforcement Learning**
- **Advanced Algorithms**
- **Design Patterns**
- **Advanced Databases**
- **Software Engineering**
- **Programming Languages**

Chapter Books

- Roayaei, M. (2024). Comprehensive Survey of Adaptive and Intelligent Education System Using Reinforcement Learning. *AI-Enhanced Teaching Methods*, 176-197.
- Esmaili, A., & Roayaei, M. (2024). UAV-Based Warehouse Management Using Multi-Agent RL: Applications, Challenges, and Solutions. In *Applications of Machine Learning in UAV Networks* (pp. 263-306). IGI Global.

Conference Papers

- Gazik, M. A. R., & Roayaei, M. (2023, May). Batch (Offline) Reinforcement Learning for Recommender System. In 2023 31st International Conference on Electrical Engineering (ICEE) (pp. 245-250). IEEE.

Journal Papers

- Roayaei Ardakany, M., & Afrougheh, A. (2024). Maximize Score in stochastic match-3 games using reinforcement learning. *Signal and Data Processing*, 20(4), 129-140.
- Roayaei, M. (2023). Learning an Efficient Text Augmentation Strategy: A Case Study in Sentiment Analysis. *International Journal of Web Research*, 6(2), 67-75.
- Rahimi, M., & Roayaei, M. (2024). A multi-view rumor detection framework using dynamic propagation structure, interaction network, and content. *IEEE Transactions on Signal and Information Processing over Networks*.
- Razaghi, B., Roayaei, M., & Charkari, N. M. (2022). On the group-fairness-aware influence maximization in social networks. *IEEE Transactions on Computational Social Systems*. M. Roayaei, "On the binarization of Grey Wolf optimizer: a novel binary optimizer algorithm", *Soft Computing*, 25(23), (2021), 14715–14728.
- M. Roayaei. "On the parameterized complexity of the problem of inferring protein–protein interaction directions based on cause–effect pairs", *Network Modeling Analysis in Health Informatics and Bioinformatics*, 8.1 (2019): 11
- M. Roayaei, and M. Razzazi. "Parameterized Complexity of Directed Steiner Network with Respect to Shared Vertices and Arcs", *International Journal of Foundations of Computer Science* 29.07 (2018): 1215-1230.
- M. Roayaei, and M. Razzazi. "Minimum Cardinality Point-to-point Connectivity Augmentation Problem", *Fundamenta Informaticae* 160.4 (2018): 447-463.
- M. Roayaei, and M. Razzazi. "Augmenting weighted graphs to establish directed point-to-point connectivity." *Journal of Combinatorial Optimization* 33.3 (2017): 1030-1056.
- M. Roayaei, and M. Razzazi. "An FPT-algorithm for modifying a graph of bounded treewidth to decrease the size of its dominating set using minimum modification." *Information Processing Letters* 116.9 (2016): 590-594.
- M. Roayaei, and M. Razzazi. "Using sticker model of DNA computing to solve domatic partition, kernel and induced path problems." *Information Sciences* 181.17 (2011): 3581-3600.