

Moein Khajehnejad

+61 (423) 591 018 • [✉ moein.khajehnejad@gmail.com](mailto:moein.khajehnejad@gmail.com) • [🌐 Personal Webpage](#)
[in moein-khajehnejad](#) • [🌐 Moein-Khajehnejad](#)

Education and Occupation

Monash University <i>Postdoctoral Research fellow, Monash Data Futures Institute</i>	Melbourne 2023 - current
Monash University <i>Ph.D., Department of Data Science and AI</i>	Melbourne 2019 - 2023
Sharif University of Technology <i>B.Sc., Computer Sciences & Electrical Engineering</i>	Tehran 2011 - 2016

Research Interests

- Deep Reinforcement Learning
- Evolutionary Game Theory
- Multi-agent systems
- Graph Representation Learning
- Computational Neuroscience
- Social Networks Analysis

Publications ([Google Scholar](#))

Conferences

- **M. Khajehnejad***, F.Habibollahi*, R. Nock, E. Arabzadeh, P. Dayan, and A. Dezfouli, "*Neural Network Poisson Models for Behavioural and Neural Spike Train Data*". In Proceedings of the **39th International Conference on Machine Learning (ICML 2022)**, **Spotlight paper**.[\[link\]](#)
- **M. Khajehnejad***, F. Habibollahi*, A. Gaurav, B. J. Kagan, "*Biological Neurons vs Deep Reinforcement Learning: Sample efficiency in a simulated game-world*". In Proceedings of the **36th Conference on Neural Information Processing Systems (NeurIPS 2022: DeepRL, MemARI ,and LMRL)**.[\[link\]](#)
- A. Khajehnejad, **M. Khajehnejad**, M. Babaei, K. P. Gummadi, A. Weller, B. Mirzasoileman "*CrossWalk: Fairness-enhanced Node Representation Learning*". In Proceedings of the **AAAI Conference on Artificial Intelligence 2022, (AAAI-22)**.[\[link\]](#)
- **M. Khajehnejad**, F. Habibollahi. "*Hunting for Dual-target Set on a Class of Hierarchical Networks*". In Proceedings of the **International Conference on Network Science**, Springer LNCS Vol. 13197. [\[link\]](#)
- **M. Khajehnejad***, A. A. Rezaei*, M. Babaei, J. Hoffmann, M. Jalili, A. Weller "*Adversarial Graph Embeddings for Fair Influence Maximization over Social Networks*". In Proceedings of the **29th International Joint Conference on Artificial Intelligence 2020 (IJCAI'20)**.[\[link\]](#)
- **M. Khajehnejad***, S. Tsirtsis*, B. Tabibian*, A. Singla, B. Schölkopf, M. Gomez-Rodriguez "*Optimal Decision Making Under Strategic Behavior*". In Proceedings of the **33rd Conference on Neural Information Processing Systems (NeurIPS 2019: Human-Centric Machine Learning)**.[\[link\]](#)

Journals

- **M. Khajehnejad**, J. García, B. Meyer, "*Explaining workers' inactivity in social colonies from first principles*". Published in the **Journal of the Royal Society Interface**.[\[link\]](#)
- **M. Khajehnejad**, J. García, B. Meyer, "*Social Learning versus Individual Learning in the Division of Labour*". Published in the **Journal of Biology**.[\[link\]](#)
- B. J. Kagan; A. Razi; A. Bhat; A. C. Kitchen; N. T. Tran; F. Habibollahi; **M. Khajehnejad**; B. J. Parker; B. Rollo; K. J. Friston "*Scientific communication and the semantics of sentience*". Published in **Neuron**. [\[link\]](#)

* indicates equal contribution

- B. J. Kagan; A. C. Kitchen; N. T. Tran; F. Habibollahi; **M. Khajehnejad**; B. J. Parker; A. Bhat; B. Rollo; A. Razi; K. J. Friston "In vitro Neurons Learn and Exhibit Sentience When Embodied In a Simulated Game-world". Published in **Neuron**. [[link](#)]
- **M. Khajehnejad**, "SimNet: Similarity-based Network Embeddings with Mean Commute Time". Published in journal of **PLoS One**. [[link](#)]
- **M. Khajehnejad**, "Efficiency of Long-Range Navigation on Treelike Fractals". Published in the journal of **Chaos, Solitons & Fractals**. [[link](#)]
- **M. Khajehnejad**, F. Habibollahi Saatlou, H. Mohammadzade, "Alzheimer's Disease Early Diagnosis using Manifold-based Semi-Supervised learning". Published in journal of **Brain Sciences**. [[link](#)]
- T. Weng, J. Zhang, **M. Khajehnejad**, M. Small, R. zheng, and P. Hui, "Navigation by anomalous random walks on complex networks". Published in the journal of **Scientific Reports**. [[link](#)]

Research Experience

Cortical Labs Pty Ltd <i>Data Scientist - Part Time</i>	Australia Jan 2022 – Current
Max Planck Institute for Software Systems (MPI-SWS) <i>Machine Learning Researcher</i>	Germany Jan 2019 – May 2019
statNLP @ SUTD-MIT <i>Machine Learning Intern</i>	Singapore Jul 2016 – Oct 2016
LSIR @ EPFL <i>Information Systems Research Intern</i>	Switzerland Jan 2016 – May 2016
SyMLab @ HKUST <i>Machine Learning Intern</i>	Hong Kong Jul 2015 – Oct 2015

Honors and Awards

- Best reviewers award, **Learning on Graphs (LoG) Conference 2022**.
- Travel award, **ICML 2022**, Baltimore, United States.
- Among 16 electess globally to **NETHIKE 2022** Summer School by **ETH Zürich**, Switzerland.
- Among 30 electess globally to **Complex networks: theory, methods, and apps** Spring School, Italy.
- Travel award, **NetSci-X 2022**, Porto, Portugal.
- Accepted to **Machine Learning Summer School (MLSS 2020)**, Germany: acceptance rate of 13.8%.
- Travel award, **NeurIPS 2019**, Vancouver, Canada.
- Ranked among top **0.05%** in the Iranian nation-wide university entrance exam of Maths and Physics.
- Semifinalist in **National Olympiad of Mathematics** Affiliated with Young Scholar Club (YSC).

Invited Talks and Presentations

- July 2023: **Open-Source Neuromorphic Hardware, Software and Wetware (OSN23)**
- Oct 2022: **University of Oxford**
- Oct 2022: **University College London (UCL)**
- July 2022: **Spotlight at ICML**
- July 2021: **Workshop on Socially Responsible Machine Learning - ICML**
- Jan 2021: **International Joint Conference on Artificial Intelligence (IJCAI)**
- July 2020: **Machine Learning Summer School (MLSS)**
- Dec 2019: **Human-Centric Machine Learning (HCML) Workshop - NeurIPS**

Technical skills

Dynamically-typed Programming: Python, MATLAB, R

Symbolic Programming: Mathematica

Statically-typed Programming: Java

Markup Programming: \LaTeX , HTML

Data Visualization: Wolfram Alpha, Tableau, Visone, MuxViz, Gephi

Graduate Teaching Assistant

Monash University

Head TA for *Multi agent systems and collective behaviour*

Semester 2 – 2022

TA for *Computational Modelling and Simulation*

Semester 1 – 2020 & 2021

University of Melbourne

TA for *Real and Artificial Neural Networks*

Semester 2 – 2020

Sharif University of Technology

TA for *Discrete Mathematics*

Semester 2, 2016

Professional Experience

Program Organizer/Area Chair:

- Workshop on Responsible AI at the International Conference on Learning Representations (**ICLR-21**)

Journal/Conference Reviewer:

- IEEE Transactions on Neural Networks and Learning Systems 2023 (**IEEE TNNLS**)
- 1st International Learning on Graphs Conference 2022 (**LOG**)
- 39th International Conference on Machine Learning (**ICML 2022**)
- 5th annual ACM FAccT conference (**ACM FAccT 2022**)
- 29th International Joint Conference on Artificial Intelligence 2020 (**IJCAI 2020**)
- Journal of Future Generation Computer Systems 2020 (**FGCS**)