

HAFEZ GHAEMI

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Last updated: October 1, 2025

EDUCATION

Ph.D. | *Computer Science*

Aug. 2023 – Aug. 2027 (expected)

Mila - [Université de Montréal](#); **GPA:** 4.13/4.0

Montreal

- **Advisors:** [Eilif Muller](#), [Shahab Bakhtiari](#)

M.Sc. | *Computer Engineering*

Sep. 2020 – Aug. 2023

University of Tehran; **GPA:** 18.0/20.0, North American: 3.72/4.0

Tehran

- **Advisors:** [Hamed Kebriaei](#), [Majid Nili](#); **Thesis:** Cumulative Prospect Theory in Multi-Agent Reinforcement Learning and Markov Games ([paper](#)) ([code](#))

M.Sc. | *Data Science and Engineering*

Sep. 2020 – July 2022

Politecnico di Torino; **GPA:** 26.3/30.0 (103/110), North American: 3.7/4.0

Turin

- **Advisors:** [Fabio Fagnani](#), [Giacomo Como](#); **Thesis:** Decentralized Value-Based Reinforcement Learning in Stochastic Potential Games ([link](#)) ([code](#))

B.Sc. | *Major: Mechanical Engineering, Minor: Computer Engineering*

Sep. 2016 – Sep. 2020

University of Tehran; **GPA:** 16.24/20.0, North American: 3.35/4.0

Tehran

- **Advisor:** [Masoud Shariat Panahi](#); **Thesis:** Design and Implementation of A Smart Camera Slider Controller with Deep Reinforcement Learning ([code](#))

PUBLICATIONS

- [[NeurIPS](#)] **H. Ghaemi**, E.B. Muller*, S. Bakhtiari*. "seq-JEPA: Autoregressive Predictive Learning of Invariant-Equivariant World Models", NeurIPS 2025 *: equal contribution. ([preprint](#))
- **H. Ghaemi**, S. Bakhtiari*, E.B. Muller*. "Self-supervised predictive learning across saccades enables visual path integration", COSYNE 2025 Abstract. *: equal contribution. ([link](#))
- A. Saibene, **H. Ghaemi**, and E. Dagdevir, "Deep Learning in Motor Imagery Eeg Signal Decoding: A Systematic Review", Neurocomputing, 2024. ([paper](#)) ([preprint](#))
- **H. Ghaemi**, S. Jamshidi, M. Mashreghi, M. Nili Ahmadabadi, and H. Kebriaei, "Risk Sensitivity in Markov Games and Multi-Agent Reinforcement Learning: A Systematic Review", arXiv:2406.06041, 2024. ([arXiv](#))
- [[AAMAS](#)] **H. Ghaemi**, H. Kebriaei, A. R. Moghaddam, and M. Nili Ahamdabadi. "Risk-Sensitive Multi-Agent Reinforcement Learning in Network Aggregative Markov Games", International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2024. ([poster](#)), ([paper](#)), ([preprint](#)), ([code](#))
- M. Nouri*, F. Moradi*, **H. Ghaemi***, A. M. Nasrabadi, "Towards real-world BCI: CCSPNet, a compact subject-independent motor imagery framework", Digital Signal Processing, 2023. *: equal contribution. ([paper](#)), ([preprint](#)), ([code](#))
- **H. Ghaemi***, E. Mirzaei*, M. Nouri*, and S. R. Kheradpisheh "BioLCNet: Reward-modulated Locally Connected Spiking Neural Networks", LOD Conference, 2022. *: equal contribution. ([paper](#)), ([preprint](#)) ([code](#))

ACADEMIC SERVICE

- **Served as an Organizer for:** Mila World Modeling Workshop (2026)
- **Reviewed for:** [ICLR] - [ICML] - [NeurIPS] - [AISTATS] - [AAAI] - [CoLLAs] - [IEEE-TCYB] - [IEEE-TSMC] - [COSYNE]

EXPERIENCE

Teaching Assistant

Mila - Université de Montréal

Montreal

- Representation Learning (Fall 2025); instructor: Aishwarya Agrawal
- Fundamentals of Machine Learning (Fall 2024); instructors: Ioannis Mitliagkas, Dhanya Sridhar

Research Assistant

Aug. 2023 – Present

Mila - Université de Montréal

Montreal

- PIs: Eilif Muller - Shahab Bakhtiari

Teaching Assistant

Part-time contract - July 2024

Neuromatch Academy

Remote

Teaching Assistant

February 2023 - July 2023

School of ECE, University of Tehran

Tehran

- Neural Networks; instructor: Ahmad Kalhor
- Game Theory; instructor: Hamed Kebriaei

Research Assistant

Oct. 2022 – Aug. 2023

School of ECE, University of Tehran

Tehran

- PIs: Hamed Kebriaei, Majid Nili

Undergraduate Research Assistant

Nov. 2019 – Aug. 2020

School of Mechanical Engineering, University of Tehran

Tehran

- PI: Masoud Shariat Panahi

Summer Intern

July 2019 – Sep. 2019

Biorobotics Lab, School of Mechanical Engineering, University of Tehran

Tehran

Undergraduate Teaching Assistant

Sep. 2019 – Jan. 2020

School of Mechanical Engineering, University of Tehran

Tehran

- Materials Science Course; instructor: Ghader Faraji

SKILLS

Languages: English (fluent), Persian (native), French (intermediate), Italian (basic), Arabic (basic)

Programming (ordered by decreasing proficiency): Python, C/C++, MATLAB, Java, SQL, MongoDB

Deep learning frameworks (ordered by decreasing proficiency): PyTorch, JAX

Miscellaneous: HPC, Git, microcontroller programming

AWARDS AND HONORS

UNIQUE Center Excellence Scholarship (Doctoral Track)

2025-2026

TOPoliTo Master's Scholarship

2020-2022

Awarded to Politecnico di Torino's international students