

ANNA HAKHVERDYAN

📍 Anna Hakhverdyan 🌐 anna-ssi ✉ ahakhver@brown.edu 🌐 anna-ssi.github.io

EDUCATION

Brown University

PhD in Computer Science

Supervisor: George Konidakis

Sep 2025 - TBD

University of Alberta

MSc in Computing Science

Supervisor: Martha White

Thesis: Accounting for Hyperparameter Tuning for Online Reinforcement Learning

Jan 2023 - Sep 2024

National Polytechnic University of Armenia

BSc in Information Technologies

Supervisor: Davit Ghazaryan

Oct 2016 - May 2021

PUBLICATIONS

Peer-Reviewed Conferences and Journal

[NeurIPS] Shushan Arakelyan, **Anna Hakhverdyan**, Miltiadis Allamanis, Christophe Hauser, Luis Antonio Garcia, Xiang Ren. *NS3: Neuro-Symbolic Semantic Code Search*. In *Neural Information Processing Systems*, 2022.

Workshops

[RLC] **Anna Hakhverdyan***, Golnaz Mesbahi*, Martha White. *Adaptive PID Control for Setpoint Tracking Using Reinforcement Learning: A Case Study for Blood-Glucose Control..* In *RLC 2025 Workshop on Practical Insights into Reinforcement Learning for Real Systems*, 2025.

* Equal contribution.

EXPERIENCE

Huawei Canada

Research Intern

- Working on tuning LLM agents in online learning setting.

May 2025 - Present

University of Alberta - RLAI Lab

Research Assistant

- Developed RL-automated PID controller for a process control environment.

- Worked on developing environments suitable for lifelong learning.

Sep 2024 - Apr 2025

Magical Labs

Machine Learning Engineer

- Developed models and pipelines for autonomous vehicle control.

- Worked on compressing large neural networks with reinforcement learning agents for mobile integration.

Oct 2021 - Jul 2022

University of Southern California - INK Lab*Jan 2021 - Nov 2021**Undergraduate Research Assistant**Supervisor: Xiang Ren*

- Helped to develop neural module networks with hypernetworks for semantic code search.
- Used combinatory categorial grammar (CCG) for parsing textual descriptions.

Perpetuum Motors*Dec 2020 - Oct 2021**Machine Learning Engineer*

- Conducted research on developing an end-to-end autonomous driving pipeline for simulated games.

ForgeFiction*Dec 2018 - Jan 2020**Software Engineer*

- Developed and designed API requests and database architectures.
- Optimized the application for maximum speed and scalability.

TEACHING EXPERIENCE

CMPUT 365 / 655: Reinforcement Learning I (Head TA)*Sept 2023 - Dec 2023***CMPUT 174:** Introduction to the Foundations of Computation I*Jan 2023 - Apr 2023**University of Alberta***TALKS**

Accounting for Hyperparameter Tuning for Online Reinforcement Learning*Openmind Continual Learning Retreat**Oct 2024**M.Sc. Thesis Seminar, University of Alberta**Sep 2024**Center for Scientific Innovation and Education (CSIE)**Jul 2024***Reinforcement Learning in NLP***Armenian NLP Community**Feb 2022***Learning from Code***Machine Learning Reading Group Yerevan**March 2021***AWARDS**

University of Alberta Graduate Recruitment Scholarship*Jan 2023 - Apr 2023**University of Alberta***AGBU US Scholarship***Sep 2022 - May 2023**AGBU***Excellence Academic Fellowship***Oct 2017 - May 2021**National Polytechnic University of Armenia***SKILLS**

Programming: Python, Jax, Pytorch, Bash, Git, SQL, NoSQL**Languages:** Armenian (native), English (fluent), Russian (fluent), Japanese (N2), Korean (L4)

COMMUNITY SERVICES

RLAI Summit

Co-organizer

Aug 2024

NeurIPS 2025, RLC 2025, ICLR 2025

Reviewer