

# ANNA HAKHVERDYAN

📍 Anna Hakhverdyan    🌐 anna-ssi    ✉ hakhverd@ualberta.ca    🌐 anna-ssi.github.io

## EDUCATION

<b>University of Alberta</b> M.Sc in Computing Science (GPA: 3.8 / 4.0) <i>Supervisor: Martha White</i> <i>Thesis title: Accounting for Hyperparameter Tuning for Online Reinforcement Learning</i>	<i>Jan 2023 - Sep 2024</i>
<b>National Polytechnic University of Armenia</b> B.Sc in Information Technologies (GPA: 3.92 / 4.00)	<i>Oct 2016 - May 2021</i>

## PUBLICATIONS

[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.

## RESEARCH EXPERIENCE

<b>University of Alberta - RLAI Lab</b> <i>Accounting for hyperparameter tuning for online reinforcement learning</i> <i>Supervisor: Martha White</i>	<i>May 2023 - Present</i>
<b>University of South California</b> <i>Semantic code search using neural modules</i> <i>Supervisor: Xiang Ren</i>	<i>Jan 2021 - Nov 2021</i>

## TEACHING EXPERIENCE

<b>CMPUT 365 / 655:</b> Reinforcement Learning I <i>University of Alberta</i>	<i>Sept 2023 - Dec 2023</i>
<b>CMPUT 174:</b> Introduction to the Foundations of Computation I <i>University of Alberta</i>	<i>Jan 2023 - Apr 2023</i>

## WORK EXPERIENCE

<b>University of Alberta - RLAI Lab</b> <i>Research Assistant</i> <ul style="list-style-type: none"><li>- Finishing up my thesis work for journal submission.</li><li>- Developing a suite of environments for process control.</li><li>- Working on developing environments suitable for Continual learning.</li><li>- Understanding and evaluating RL agents in curated animal learning experiments.</li></ul>	<i>Sep 2024 - Present</i>
<b>Magical Labs</b> <i>Machine Learning Engineer</i> <ul style="list-style-type: none"><li>- Developed models and pipelines for autonomous vehicle control.</li><li>- Worked on compressing large neural networks with RL agents for mobile integration.</li></ul>	<i>Oct 2021 - Jul 2022</i>

**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.

**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***Aremnian 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, Bash, Version Control, SQL, NoSQL**Libraries:** Jax, Pytorch, Numpy, Pandas, sklearn, gymnasium, brax**Languages:** Armenian (native), English (fluent), Russian (fluent), Japanese (N2), and Korean (L4)**COMMUNITY SERVICES**

---

**RLAI Summit***Aug 2024**Co-organizer***IMOL Workshop at NeurIPS***Oct 2023**Reviewer*