ANNA HAKHVERDYAN

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EDUCATION

University of Alberta *Jan 2023 - Present*
M.Sc Computing Science
Supervisor: Martha White
Expected graduation: December 2024

National Polytechnic University of Armenia *Oct 2016 - May 2021*
B.S. of Information Technologies
GPA: 3.92 / 4.00

PUBLICATIONS

NS3: Neuro-Symbolic Semantic Code Search
Shushan Arakelyan, **Anna Hakhverdyan**, Miltiadis Allamanis, Christophe Hauser, Luis Antonio Garcia, Xiang Ren
Thirty-sixth Conference on Neural Information Processing Systems (NeurIPS 2022)
10th International Conference on Learning Representations Deep Learning for Code Workshop (ICLR DL4C 2022)

RESEARCH EXPERIENCE

University of Alberta - RLAI Lab *May 2023 - Present*
Supervisor: Martha White

University of South California *Jan 2021 - Nov 2021*
Semantic code search using Neural Modules
Supervisor: Xiang Ren

- Developed neural module networks with hypernetworks for semantic code search
- Researched and evaluated baselines for the model comparison
- Used Combinatory Categorial Grammar (CCG) for function docstring parsing

TEACHING EXPERIENCE

CMPUT 365 / 655: Reinforcement Learning I *Sept 2023 - Present*
University of Alberta - Teaching Assistant

CMPUT 174: Introduction to the Foundations of Computation I *Jan 2023 - Apr 2023*
University of Alberta - Teaching Assistant

WORK EXPERIENCE

Magical Labs *Oct 2021 - Jul 2022*
Machine Learning Engineer

- Developed models and pipelines for autonomous vehicle control
- Worked on compressing large Neural Networks with RL agents for mobile integration

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

- Assembled a DL model using PPO algorithm to drive a simulated game
- Researched different approaches for autonomous vehicle control

ForgeFiction *Dec 2018 - Jan 2020*
Software Engineer
- Developed and designed API requests and database architectures
- Optimized the application for maximum speed and scalability

SKILLS

Programming:	Python, Bash, Version Control, Vim
Machine Learning:	PyTorch, Jax, Gym, MuJoCo, OpenCV
Databases:	SQL, NoSQL, MongoDB, Scraping, Beautiful Soup, Selenium
Languages:	Armenian (native), English (fluent), Russian (fluent), Japanese (N2), and Korean (L4)

EXTRACURRICULAR ACTIVITIES

AI Bootcamp *Oct 2019 - Jan 2020*
FAST Foundation
Final project: Character generation from text descriptions

CS Teaching Assistant *Jan 2018 - Dec 2018*
OGMA Inc.
- Explained computer science fundamentals to people from other disciplines
- Compiled examples and homework
- Supervised their independent projects

Japanese translator *Mar 2017 - Jan 2018*
- Translated comics from Japanese to English
- Translated orally for a fabric restoration workshop

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

TALKS

Learning from Code
Machine Learning Reading Group Yerevan

Reinforcement Learning in NLP
Aremnian NLP community