Parand Alizadeh Alamdari

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EDUCATION

• University of Toronto, Toronto, Canada

2020 - 2025

Affiliated with Vector Institute for Artificial Intelligence Ph.D. in Computer Science, advisor: Prof. Sheila McIlraith

• Sharif University of Technology, Tehran, Iran B.Sc. in Computer Engineering, Summa Cum Laude (top 2%) 2015 - 2020

Conference Publications

- Parand A. Alamdari, Toryn Klassen, Elliot Creager, and Sheila McIlraith. Remembering to Be Fair:
 Non-Markovian Fairness in Sequential Decision Making. In In Proceedings of the International Conference on Machine Learning (ICML), 2024
- Toryn Klassen, Parand A. Alamdari, and Sheila McIlraith. Epistemic Side Effects: An AI Safety Problem. In Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023.
- Parand Alizadeh Alamdari, Toryn Q. Klassen, Rodrigo Toro Icarte, and Sheila A. McIlraith. Be Considerate: Avoiding Negative Side Effects in Reinforcement Learning. In Proceedings of the International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2022.
- Parand Alizadeh Alamdari, Guy Avni, Thomas A Henzinger, and Anna Lukina. Formal Methods with a Touch of Magic. In *Proceedings of the 20th Conference on Formal Methods in Computer-Aided Design*, 2020.

Workshop Publications

- Parand A. Alamdari, Toryn Klassen, Elliot Creager, and Sheila McIlraith. Remembering to Be Fair: On Non-Markovian Fairness in Sequential Decision Making (Priliminary Report). NeurIPS Workshop on Algorithmic Fairness through the Lens of Time, 2023.
- Toryn Klassen, Parand Alizadeh Alamdari, and Sheila McIlraith. Epistemic Side Effects and Avoiding Them (Sometimes). NeurIPS Workshop on ML Safety, 2022.
- Parand Alizadeh Alamdari, Toryn Klassen, Rodrigo Toro Icarte, and Sheila McIlraith. Avoiding Negative Side Effects by Considering Others. NeurIPS Workshop on Safe and Robust Control of Uncertain Systems, 2021.

PREPRINTS UNDER REVIEW

- Parand A. Alamdari, Soroush Ebadian, and Ariel Procaccia. Policy Aggregation. 2024
- Parand A. Alamdari, Yanshuai Cao, and Kevin Wilson. Jump Starting Bandits with LLM-Generated Prior Knowledge. 2024.

RESEARCH EXPERIENCE

• Research Intern at Borealis AI

Feb 2024 - June 2024

Supervisors: Yanshuai Cao, Kevin Wilson

Analyzed the capabilities of large language models (LLMs) to simulate human preferences. Developed an initialization algorithm for contextual multi-armed bandits using LLMs to simulate human behavior and reduce online learning regret.

• Research Assistant at University of Toronto and Vector Institue

Sept 2020 – Present

Supervisor: Sheila McIlraith

Developing techniques to characterize and build AI technologies that are properly aligned with human values.

• Research Intern at IST Austria in Henzinger Group

July 2019 - Sept 2019

Supervisors: Thomas Henzinger and Guy Avni

Designed and implemented a controller which is provably correct and efficient, with explainable decisions using an intermediate concise model to approximates the neural network.

• Research Intern at EPFL in DIAS Lab

July 2018 - Sept 2018

Supervisors: Anastasia Ailamaki and Eleni Tzirita Zacharatou

Designed a tree-based data structure and a packing algorithm for indexing spatial data with several categories.

• Research Intern at EPFL in DATA Lab

July 2017 - Sept 2017

Supervisors: Christoph Koch and Amir Shaikhha

Redesigned and optimized an SQL query compiler DBToaster by introducing a new materialization algorithm.

Honors and Awards

• Recipient of Google DeepMind Fellowship for PhD studies.

2021 - 2025

• Recipient of General Motors Women in Science and Mathematics Award.

2023

- Recipient of Graduate Fellowship from Schwartz Reisman Institute for Technology and Society,
 University of Toronto.
- Recipient of AI Risk Analysis Award in NeurIPS Workshop for ML Safety.

2022

- Ranked 3rd in cumulative GPA among all 150 students of Computer Engineering, 2015 beginners, Sharif University of Technology.
- Silver Medal in the 24th Iranian National Olympiad in Informatics (INOI).

2014

- Recipient of **Research Scholarship** from the Austrian Agency for International Cooperation in Education & Research (OeAD-GmbH).
- Ranked 150th in Iran's university entrance exam among over 181,000 participants.

2015

• 4th Place in the International RoboCup Competitions, Rescue Simulation League, as a member of Poseidon team, Eindhoven, Netherlands.

Working Experience

• Data Scientist at Cafebazaar AI and Infrastructure Services, Tehran, Iran Feb 2020 – Sept 2020

- Led the development of the natural language processing part of text-to-speech and speech-to-text products for Persian language.
- Software Engineer at Cafebazaar, Tehran, Iran

June 2016 - March 2018

- Released an application recommender system for Cafébazaar android app store with 37 million users.
- Designed and developed Big Data analytics tools for internal usage.

TEACHING EXPERIENCE

- Teaching Assistant
 - Introduction to Artificial Intelligence (CSC384), University of Toronto Fall &

Fall & Winter 2021 - 2023

• Knowledge Representation and Reasoning (CSC486/2502), University of Toronto

Fall 2021 & 2024

Design of Algorithms (Head TA), Sharif University of Technology
Data Mining (Graduate Course), Sharif University of Technology

Fall 2019 Fall 2018

• Discrete Mathematics (Head TA), Sharif University of Technology

Winter 2017 - 2019

SKILLS

- **Programming Languages**: Python, Java, Scala, C/C++, and R.
- Machine Learning Frameworks: PyTorch, Keras, Tensorflow, Scikit-learn, Pandas, NumPy.
- Miscellaneous: Git, Bash, Scrum, Django framework, and LATEX.