Parand Alizadeh Alamdari

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Education

- **University of Toronto, Toronto, Canada** 09/2020–Present
  Affiliated with Vector Institute for Artificial Intelligence
  Ph.D. in Computer Science, advisor: Prof. Sheila McIlraith
- **Sharif University of Technology, Tehran, Iran** 09/2015–06/2020
  B.Sc. in Computer Engineering, *Summa Cum Laude* (top 2%)

Research Experience

- **Research Intern at Microsoft Research** 06/2025–09/2025
  Supervisors: Xinnuo Xu, Molly Xia, Javier Gonzalez
  Improving LLM reasoning in test time.
- **Research Intern at Borealis AI** 02/2024–06/2024
  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** 09/2020–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** 07/2019–09/2019
  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** 07/2018–09/2018
  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** 07/2017–09/2017
  Supervisors: Christoph Koch and Amir Shaikhha
  Redesigned and optimized an SQL query compiler DBToaster by introducing a new materialization algorithm.

Conference Publications (Google Scholar)

- **Parand A. Alamdari**, Soroush Ebadian, and Ariel Procaccia. Policy Aggregation. In *Proceedings of the 38th Annual Conference on Neural Information Processing Systems (NeurIPS)*, 2024.
- **Parand A. Alamdari**, Yanshuai Cao, and Kevin Wilson. Jump Starting Bandits with LLM-Generated Prior Knowledge. In *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2024. (Also submitted as a US patent).
- **Parand A. Alamdari**, Toryn Klassen, Elliot Creager, and Sheila McIlraith. Remembering to Be Fair: Non-Markovian Fairness in Sequential Decision Making. 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 International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 2023.

- **Parand A. Alamdari**, Toryn Q. Klassen, Rodrigo Toro Icarte, and Sheila 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 A. Alamdari**, Guy Avni, Thomas A Henzinger, and Anna Lukina. Formal Methods with a Touch of Magic. In *Proceedings of the Conference on Formal Methods in Computer-Aided Design (FMCAD)*, 2020.

Working Papers

- **Parand A. Alamdari**, Toryn Klassen, and Sheila McIlraith. Auditing, monitoring, and intervention for compliance of advanced AI systems. *Manuscript under review*, 2025

- Andrew Li, Toryn Klassen, Andrew Wang, **Parand A. Alamdari**, and Sheila McIlraith. Ground-Compose-Reinforce: Tasking Reinforcement Learning Agents through Formal Language. *Manuscript under review*, 2025

Selected Workshop Publications

- **Parand A. Alamdari**, Toryn Klassen, and Sheila McIlraith. Auditing, Monitoring, and Intervention for Compliance of Advanced AI Systems. *ICML Workshop on Reliable and Responsible Foundation Models*, 2025

- Toryn Klassen, **Parand A. Alamdari**, and Sheila McIlraith. Pluralistic Alignment Over Time. *NeurIPS Workshop on Pluralistic Alignment*, 2024.

- **Parand A. Alamdari**, Toryn Klassen, Rodrigo Toro Icarte, and Sheila McIlraith. Being Considerate as a Pathway Towards Pluralistic Alignment for Agentic AI. *NeurIPS Workshop on Pluralistic Alignment*, 2024.

- **Parand A. Alamdari**, Toryn Klassen, Elliot Creager, and Sheila McIlraith. Remembering to Be Fair: On Non-Markovian Fairness in Sequential Decision Making (Preliminary Report). *NeurIPS Workshop on Algorithmic Fairness through the Lens of Time*, 2023.

- Toryn Klassen, **Parand A. Alamdari**, and Sheila McIlraith. Epistemic Side Effects and Avoiding Them (Sometimes). *NeurIPS Workshop on ML Safety*, 2022.

- **Parand A. 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.

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. 2022–2023
- Recipient of **AI Risk Analysis Award** in NeurIPS Workshop for ML Safety. 2022
- **Ranked 3**rd in cumulative GPA among all 150 students of Computer Engineering, 2015 beginners, Sharif University of Technology. 2020
- **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). 2019
- **Ranked 150**th in Iran's university entrance exam among over 181,000 participants. 2015
- **4**th **Place** in the International RoboCup Competitions, Rescue Simulation League, as a member of Poseidon team, Eindhoven, Netherlands. 2013

Working Experience

- **Machine Learning Engineer at Cafebazaar AI and Infra Services, Tehran, Iran** 02/2020–09/2020
  - 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** 06/2016–03/2018
  - 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 2021–2025
  - **Knowledge Representation and Reasoning (CSC486/2502)**, University of Toronto Fall 2021 & 2024
  - **Design of Algorithms (Head TA)**, Sharif University of Technology Fall 2019
  - **Data Mining (Graduate Course)**, Sharif University of Technology Fall 2018
  - **Discrete Mathematics (Head TA)**, Sharif University of Technology Winter 2017–2019

Professional Service

- Reviewer for NeurIPS 2025, ICLR 2025, NeurIPS 2024, ACL 2024, AIES 2024, and AAMAS 2023.

Skills

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