Parand Alizadeh Alamdari

Website : https://praal.github.io
Email : parand@cs.toronto.edu

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** 2015 – 2020
  B.Sc. in Computer Engineering, *Summa Cum Laude* (top 2%)

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
- 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 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.
- 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 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, 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.
- 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.

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 - Present
  Supervisors: Yanshuai Cao, Kevin Wilson
  Analyzing the capabilities of large language models (LLMs) to simulate human preferences.
  Designing a framework using Reinforcement Learning to utilize the knowledge of LLMs to infer individuals' preferences.
- **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. 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

- **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 & Winter 2021 - 2023
  - **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

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.