

# Mohammad Reza Samsami

M.SC. STUDENT · COMPUTER SCIENCE / ARTIFICIAL INTELLIGENCE

*Mila - Quebec AI Institute / Université de Montréal*

✉ mohammad-reza.samsami@mila.quebec | 🏠 www.mrsamsami.github.io | 📧 mrsamsami | 🌐 mohammadrezasamsami

## Research Interests

**(Model-based, Offline) Reinforcement Learning, Causality, Foundation Models, Memory**

## Education

### Mila - Quebec AI Institute / Université de Montréal

*Montréal, Canada*

M.SC. IN COMPUTER SCIENCE

*2021 - 2023*

- Supervisors: Prof. Sarath Chandar, Prof. Irina Rish
- GPA: 4.15 / 4.3

### Sharif University of Technology

*Tehran, Iran*

B.Sc. IN COMPUTER SCIENCE

*2016 - 2021*

- GPA: 18.18 / 20

## Honors & Grants

- 2023 **Merit-based Scholarship for Excellence in Research**, Université de Montréal
- 2015 **Silver Medal in Iranian National Olympiad in Informatics (INOI)**, Young Scholar Club
- 2022 **Merit-based Scholarship for Supporting the Studies and Research**, Université de Montréal
- 2019 **Granted the Travel and Conference Fund**, Association for Computational Linguistics
- 2016 **Ranked Top 0.3%**, Iran's Universities Entrance Exam
- 2015 **Fellowship**, Grant for undergraduate students, courtesy of the National Elite Foundation
- 2019 **Fellowship**, Association for Computational Linguistics

## Publications

- M. R. Samsami**, M. Bahari, S. Salehkaleybar, A. Alahi. 2021. Causal Imitative Model for Autonomous Driving. Preprint.
- F. Hosseini, H. Fooladi, **M. R. Samsami**. 2019. Recognizing arrow of time in the short stories. WiNLP at ACL.
- M. R. Samsami**, H. Alimadad. 2020. Distributed Deep Reinforcement Learning: An Overview. Preprint.

## Research Experience

### ServiceNow Research

SUPERVISORS: MAXIME GASSE AND ALEXANDRE LACOSTE

*2021 - Pres.*

- Visiting Researcher

### Mila - Quebec AI Institute

SUPERVISORS: SARATH CHANDAR AND IRINA RISH

*2021 - Pres.*

- Research Master's

### Ecole polytechnique fédérale de Lausanne (EPFL)

SUPERVISORS: SABER SALEHKALEYBAR AND ALEXANDRE ALAHI

*2020 - 2021*

- Research Intern

### Shenakht Pajouh

PROJECT MANAGER: HOSEIN FOOLADI

*2018 - 2019*

- Researcher

## Teaching Experience \_\_\_\_\_

2016 - 2019    **Algorithm Design and Programming for Olympiad**, Instructor *Karaj, Iran*  
2019 - 2021    **Linear Programming, Information Theory**, Teaching Assistant at Sharif University *Tehran, Iran*

## Professional and Work Experience \_\_\_\_\_

2023    **Visiting Researcher**, ServiceNow Research  
2021    **Data Scientist**, MetoData  
2017-2020    **Researcher and Program Manager**, Shenakht Pajouh

## Skills \_\_\_\_\_

**Machine Learning and Data Analytics:** JAX, PyTorch, TensorFlow, Scikit-Learn, Spark, Pandas.

**Programming Languages:** Python, C++, C, Java

## Selected Projects \_\_\_\_\_

**Implementation of Multiplicative Compositional Policies**, Robot Learning Course Project

**Crypto-Trading with Deep Reinforcement Learning**, MetoData Company

**Distributional Reinforcement Learning**, Reinforcement Learning Course Project

**Causal Reinforcement Learning**, Causal Inference Course Project

**An Analysis of Convex Optimization Algorithms**, Convex Optimization Course Project

**Language Modeling on Gutenberg with TensorFlow Keras**, Shenakht Pajouh Company

## Open Source Contribution \_\_\_\_\_

**RLHive**, A framework designed to facilitate research in reinforcement learning

## Selected Courses \_\_\_\_\_

Reinforcement Learning, Robot Learning, Representation Learning, Causal Inference, Convex Optimization, Probabilistic Graphical Models, Information Theory, Game Theory, Distributed Systems, Stochastic Processes, Neural Scaling Laws

## Languages \_\_\_\_\_

Farsi: Native

English: **Fluent (TOEFL: 106)**

Arabic: Familiar

French: Familiar

## Extracurricular Activities \_\_\_\_\_

2020-Pres.	<b>Sharif Causal AI Journal Club</b> , Member	<i>Sharif Uni.</i>
2017-2019	<b>Sharif Cognitive Science Community (Shenasa)</b> , Founding Member of the Central Council	<i>Sharif Uni.</i>
2017-2018	<b>Student's Scientific Association of the Department</b> , Member of Central Council	<i>Sharif Uni.</i>
2017	<b>Sharif Data Science Conference</b> , Co-Organizer	<i>Sharif Uni.</i>
2022-Pres.	<b>Social Events</b> , Organizer	<i>Mila</i>
2022	<b>Conference on Lifelong Learning Agents</b> , Volunteer	<i>McGill</i>