# Mohammad Shahverdikondori

### Research Interests

Sequential Learning

Causality

Statistics

#### Education

PhD candidate

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE (EPFL) UNIVERSITY

Doctoral Program in Management of Technology under supervision of Prof. Negar Kiyavash

**B.Sc. in Computer Science (GPA:18.04/20)** 

SHARIF UNIVERSITY OF TECHNOLOGY

Tehran, IRAN

September 2018 - June 2023

Lausanne - Switzerland

September 2023 - Present

### Selected Publications

- Mohammad Shahverdikondori, Ehsan Mokhtarian, Negar Kiyavash "QWO: Speeding Up Permutation-Based Causal Discovery in LiGAMs." *Published at NeurIPS 2024*. (Paper)(Code)
- Mohammadhossein Bahari, Saeed Saadatnejad, Ahmad Rahimi, Mohammad Shahverdikondori, Amir Hossein Shahidzadeh, Seyed-Mohsen Moosavi-Dezfooli, Alexandre Alahi, "Vehicle trajectory prediction works, but not everywhere". Published at CVPR 2022. (Webpage)
- Mohammad ShahverdiKondori, Amir Mohammad Abouei, Alireza Rezaeimoghadam, Negar Kiyavash "Optimal Best Arm Identification with Post-Action Context." arXiv 2025. (arXiv)(Code)
- Fateme Jamshidi\*, Mohammad Shahverdikondori\*, Negar Kiyavash "Graph-Dependent Regret Bounds in Multi-Armed Bandits with Interference." *arXiv* 2025. (arXiv)
- Mohammad Shahverdikondori, Mohammad Reza Badri, Negar Kiyavash "Best Group Identification in Multi-Objective Bandits." arXiv 2025. (arXiv)
- Niloofar Fakhfoor, Mohammad Shahverdikondori, Sajjad Hashembeiki, Mohammadjavad Norouzi, Hoda Mohammadzadeh, "Video alignment using unsupervised learning of local and global features." Submitted to Scientia Iranica. (arXiv)

#### **Honors & Awards**

- 2018 **Silver Medal**, International Mathematical Olympiad(IMO)
- 2023 **Gold Medal**, International Mathematics Competition(IMC) for university students.
- 2022 Silver Medal, National Statistics Olympiad
- 2018 **Silver Medal**, Asian Pacific Mathematical Olympiad (APMO)
- 2017 Gold Medal, National Mathematical Olympiad
- 2017 **Bronze Medal**, Iranian Geometry Olympiad (IGO)
- 2016 **Bronze Medal**, International Mathematics Competition(IMC)

#### Skills\_

**Machine learning:** Pytorch, Scikit-learn, OpenCV, Pandas, Numpy, R Programming

**Web and Databases:** PostgreSQL, SQL Server, HTML, CSS **Programming Language:** Python, C++, Java, X86 Assambly

#### Professional Activities\_\_\_\_\_

PhD Summit Participant
CITADEL / CITADEL SECURITIES

London, UK

March 2025

Selected participant for the highly competitive PhD Summit event, focused on research, technology, and quantitative finance.

Research Intern Online

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE (EPFL) UNIVERSITY

Visual Intelligence for Transportation (VITA) lab. Under supervision of Prof. A. Alahi

Summer Research Intern Online

**CHINESE UNIVERSITY OF HONG KONG** 

July 2020 - September 2020

June 2021 - November 2021

Under supervision of Prof. Siu On Chan.

**Data Scientist**Tehran, IRAN

SHARIF UNIVERSITY OF TECHNOLOGY SCIENCE TECHNOLOGY PARK

September 2019 - April 2020

#### **Teaching Olympiad Level Mathematics**

All around Iran

HIGH SCHOOL STUDENTS 2017 - 2024

- Teaching at Iran's gold medals preparation camp.
- Exceptional talent high schools Allame Helli 1 Tehran, Farzanegan 5 and 6 Tehran, Shahid Soltani Karaj, Shahid Dastgheyb Shiraz, Farzanegan Shiraz, Mirza Kochak Khan 1 and 2 Rasht, Allame Helli Malard, Sorosh Tehran and some other High Schools around Iran.

## **Volunteer Activities**

- Committee member of the Iranian Students Association at EPFL
- Committee Member of Students' Scientific Organization at the Department of Mathematical Sciences at Sharif University of Technology

## Languages\_

English: Advanced
 Persian: Native
 Turkish(Azari): Native