

Mohammad Saneian

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Codeforces: Sasa

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EDUCATION

- **Northeastern University** Boston, USA
PhD in computer science Sep 2022 - Present
 - **Advisor:** Soheil Behnezhad and Mahsa Derakhshan
 - **Sharif University of Technology** Tehran, Iran
B.Sc. in Computer Engineering Sep 2017 - February 2022
 - **Allameh Helli 1 High School** Tehran, Iran
Diploma in Mathematics and Physics Discipline Sep 2013 - Jun 2017
- Affiliated with the National Organization for the Development of Exceptional Talents (NODET)

RESEARCH INTERESTS

- Theoretical computer science
- Sublinear algorithms
- Game theory

PUBLICATIONS

- **Streaming Edge Coloring with Asymptotically Optimal Colors**
S. Behnezhad, M. Saneian
Submitted
- **Are socially-aware trajectory prediction models really socially-aware?**
S. Saadatnejad, M. Bahari, P. Khorsandi, M. Saneian, M. Moosavi-Dezfooli, A. Alahi
Published in Journal of Transportation Research Part C , 2022
- **Simple Streaming Algorithms for Edge Coloring**
M. Asari, M. Saneian, H. Zarrabi-Zadeh
Published in ESA 2022

HONORS AND AWARDS

- **Silver Medalist** in the 29th International Olympiad of Informatics (IOI) 2017
- **Onsite contest finalist** at Snackdown19, ranked **22th** among **25,000** teams 2019
- **Silver Medalist** in the 11th Asia-Pacific Informatics Olympiad (APIO) 2017
- **Gold Medalist** in the 26th Iranian National Olympiad in Informatics (INOI) 2016
Gold medals are awarded to 8 people selected after a year of competition among over 10000 students.
- **Bronze medalist** in the 25th Iranian National Olympiad in Informatics (INOI) 2015
- **Gold medalist** in the ACM ICPC regional contest 2018
- **Winner** of ACM-style contests: FCPC-2019, Amirkabir 2019 2019

INTERNSHIP

- **Rahnema College** Tehran, Iran
Data Science Intern Spring 2020
 - Gained some knowledge around Machine learning and Deep learning.
 - Became familiar with Big data technologies, such as Hadoop and Spark.
 - Did a team project for detecting fraudulent comments on Sanjagh website based on their extracted features.
- **EPFL (Ecole polytechnique federale de Lausanne)** Lausanne, Switzerland
Research Intern July 2020 - March 2021
Supervisor: Professor Alexander Alahi
 - In this internship our project was attacking trajectory prediction models. We studied the impact of localization errors on their predictions which is essential for real-world applications.

TEACHING ASSISTANT

- **Teaching Assistant, CE Department**
Sharif University of Technology
 - * **Discrete Mathematics:** Instructor: Prof. Mohammad Ali Abam Spring 2019
 - * **Discrete Mathematics:** Instructor: Prof. Hamid Zarrabi-Zadeh Spring 2020
 - * **Data Structures and Algorithms:** Instructor: Prof. Mahdi Safarnejad-Boroujeni Fall 2019
 - * **Design of algorithms:** Instructor: Prof. Ali Sharifi-Zarchi Spring 2020
 - * **Design of algorithms:** Instructor: Prof. Hamid Zarrabi-Zadeh Fall 2020
 - * **Artificial Intelligence:** Instructor: Prof. M.Hossein Rohban Fall 2020

ACADEMIC SERVICES

- **Olympiad in Informatics Instructor** Summer 2017 - Fall 2018
Allame Helli 1 High school
 - * Taught Algorithms and Data Structures to students preparing for the National Olympiad in Informatics (INOI).
- **Scientific Staff/Committee**
 - * Scientific Staff, DataDays-2021, Iran's Largest Machine Learning and Data Science Competition.
 - * Scientific Committee, Iran's National Olympiad in informatics, final exams theory problems.
 - * Scientific member of Rasta school at summer 2020, developed creative methods to teach Flow algorithms to high school students.

SKILLS

- **TOEFL:** Total: 104, Reading: 25, Listening: 30, Speaking: 26, Writing: 23
- **Programming:** Python (Proficient), C++ (Proficient), Java (Proficient), R, Sql, Bash
- **Machine Learning Frameworks::** PyTorch, Keras, NumPy, Scikit-Learn, Pandas
- **Web Development & Database:** HTML, CSS, JavaScript, Docker, PostgreSQL, Spark
- **Miscellaneous:** Git, Linux, Windows, L^AT_EX, Microsoft Office (Word, Excel, Powerpoint)