

## Seyed Sobhan Mir Yoosefi

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### RESEARCH INTERESTS

- ◇ Theoretical Machine Learning
- ◇ Reinforcement Learning
- ◇ Online Learning

### EDUCATION

- ◇ **Ph.D. in Computer Science** 09/2017 - present  
Princeton University  
**Advisor:** Prof. Yoram Singer and Robert Schapire
- ◇ **M.A. in Computer Science** 09/2017 - 06/2019  
Princeton University  
**Advisor:** Prof. Yoram Singer and Robert Schapire
- ◇ **B.Sc. Degree in Computer Engineering** 09/2013 - 06/2017  
Sharif University of Technology, Tehran, Iran  
Major : Software Engineering

### HONORS AND AWARDS

- ◇ Princeton first year **fellowship** in Natural Sciences and Engineering 2017
- ◇ **3<sup>rd</sup> place** in ACM-ICPC Greater New York Regional Contest 2017
- ◇ **2<sup>nd</sup> place** in 15<sup>th</sup> & 16<sup>th</sup> Regional Contest of ACM-ICPC in Asia 2013 & 2014
- ◇ Recipient of **the Grant** for Undergraduate Studies from 2013 - present  
**the Iranian National Foundation of Elites**, for Gold Medal of Olympiad in Informatics and academic success
- ◇ **2<sup>nd</sup> highest GPA** among all students of Computer Engineering 2013 - present  
About 150 students
- ◇ **Gold Medal** in *Iranian National Olympiad in Informatics* 2012  
Awarded a gold medal among more than 4000 contestants
- ◇ Member of **The National Organization for Development of Exceptional Talents (NODET)** 2006 - present

### PUBLICATIONS

- ◇ **Reinforcement Learning with Convex Constraints**  
*NeurIPS 2019*  
Sobhan Miryoosefi, Kianté Brantley, Hal Daumé III, Miroslav Dudík, Robert Schapire
- ◇ **Constrained episodic reinforcement learning in concave-convex and knapsack settings**  
*submitted to NeurIPS 2020*  
Kianté Brantley, Miroslav Dudík, Thodoris Lykouris, Sobhan Miryoosefi, Max Simchowitz, Aleksandrs Slivkins, Wen Sun

### TEACHING AND WORKING EXPERIENCE

- ◇ **Mathematics of Machine Learning Summer School** Summer 2019  
Organized by Microsoft Research and University of Washington  
Teaching Assistant  
Topic: Statistical Learning Theory
- ◇ **Princeton University**  
Teaching Assistant  
Courses: Advanced Algorithm Design (Fall 2018), Theoretical Machine Learning (Spring 2019), Introduction to Machine Learning (Spring 2020)

- ◇ Internship at **Cafebazaar**  
Software Developer (Summer 2016)  
Developing a customized Android OS used by fraud detection team
- ◇ **Sharif University of Technology**  
Teaching Assistant  
Courses: Probability and statistics (Fall 2015), Design of Algorithms (Fall 2015 & 2016), Computer Architecture (Spring 2016)
- ◇ **Preparation of Iran National Olympiad in Informatics** 2013 - 2017  
Training students during *INOI*'s summer camp, where I present subjects on Graph Theory, Algorithms, and Programming to qualified applicants from whom the members of the national team for IOI are to be selected.  
Preparation of theoretical and programming contests.
- ◇ **Teaching Olympiad in Informatics Related Topics** 2012 - 2017  
Preparing high school students for Olympiad in Informatics  
Topics: Algorithms, Graph Theory, Programming, Combinatorics

## SKILLS

- ◇ **Programming:** C++, Python, Java, Matlab
- ◇ **ML Framework:** PyTorch
- ◇ **Language:** English, Persian
- ◇ **Document Preparation:** Microsoft Office, L<sup>A</sup>T<sub>E</sub>X

## SERVICES

- ◇ Program Committee for ICML 2020 workshop  
*Theoretical Foundation of Reinforcement Learning*