## Seved Sobhan Mir Yoosefi

Computer Science Department Princeton University 35 Olden Street Princeton, NJ 08544

miryoosefi@cs.princeton.edu sobhan.miryoosefi@gmail.com

(+1)609-325-8779

## RESEARCH INTERESTS

- ♦ Theoretical and Applied Machine Learning
- ♦ Reinforcement Learning
- ♦ Online Learning

## **EDUCATION**

## ♦ Ph.D. in Computer Science

09/2017 - present

Princeton University

Advisor: Prof. Chi Jin and Robert Schapire

⋄ M.A. in Computer Sceiece

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

# PUBLICATIONS $\diamond$ Reinforcement Learning with Convex Constraints

NeurIPS 2019

Sobhan Miryoosefi, Kianté Brantley, Hal Daumé III, Miroslav Dudik, Robert Schapire

 Constrained Episodic Reinforcement Learning in Concave-convex and Knapsack Settings

NeurIPS 2020

(by alphabetical order) Kianté Brantley, Miroslav Dudik, Thodoris Lykouris, Sobhan Miryoosefi, Max Simchowitz, Aleksandrs Slivkins, Wen Sun

♦ Bellman Eluder Dimension: New Rich Classes of RL Problems, and Sample-Efficient Algorithms

submitted to COLT 2021

(by alphabetical order) Chi Jin, Qinghua Liu, Sobhan Miryoosefi

## HONORS AND AWARDS

- ♦ Princeton first year **fellowship** in Natural Sciences and Engineering 2017
- $\diamond~{\bf 3^{rd}}$ place in ACM-ICPC Greater New York Regional Contest

2017

2012

- ♦ 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 - 2017 the Iranian National Foundation of Elites, for Gold Medal of Olympiad in Informatics and academic success
- $\diamond~\mathbf{2^{nd}}$  highest GPA among all students of Computer Engineering 2013 - 2017 About 150 students
- ♦ Gold Medal in Iranian National Olympiad in Informatics Awarded a gold medal among more than 4000 contestants
- ⋄ Member of The National Organization for Development of 2006 - present Exceptional Talents (NODET)

TEACHING AND WORKING EXPERIENCE

## ⋄ Princeton University

Research Assistant

## ⋄ Princeton University

Teaching Assistant

Courses: Advanced Algorithm Design (Fall 2018), Theoretical Machine Learning (Spring 2019), Introduction to Machine Learning (Spring 2020), Convex Optimization (Fall 2020)

## ♦ Mathematics of Machine Learning Summer School

Summer 2019

Organized by Microsoft Research and University of Washington

Teaching Assistant

Topic: Statistical Learning Theory

## ♦ 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, LATEX

## **SERVICES**

 Program Committee for ICML 2020 workshop Theoretical Foundation of Reinforcement Learning

 $\diamond$  Reviewer for ICML 2021

2017 - present