Keivan Rezaei

kerezaei@ce.sharif.edu k1rezaei78@gmail.com LinkedIn

Education

• Sharif University of Technology, Tehran, Iran

September 2018 - Present

GPA: 19.92 / 20, **Rank** 2^{nd}

Bachelor of Science, Computer Engineering

Relevant courses: Artificial Intelligence: 20, Modern Information Retrieval: 20,

Linear Algebra: 20, Probability and Statistics: 20

Design of Algorithms: 20, Data Structures: 20,

General Math: 20, Introduction to Bio Informatics: 20

• Young Scholars Club, Tehran, Iran

2017 - 2018

Official Preparation for International Olympiad in Informatics 2018

 $Studied\ courses$: Combinatorics, Adv. Data Structures, Linear Algebra

• Allame Helli High School, Tehran, Iran

2014 - 2016

Mathematics and Physics Dicipline

School is affiliated with the National Organization for Development of Exceptioanl Talents (NODET)

Research Experience

- Summer Internship at EPFL, Theory of Machine Learning (TML) Lab, Summer 2021
 - * Research on last iterate convergence of stochastic gradient descent in interpolation regime at non-strongly convex setting.
 - * The aim of that project was to improve convergence rate by using Nesterov method.

under supervision of Prof. Nicolas Flammarion.

- Summer Internship at Max Planck Institute, Summer 2020
 - * Research on solving semi-definite programming based on Physarum mathematical model.
 - * The aim of that project was to derive an algorithm to solve SDP problem based on Physarum model and prove its convergence.

under supervision of Prof. Andreas Karrenbauer.

- Bachelor Project, Fall 2021
 - * Survival prediction of oral cancer patients based on medical data.
 - * The aim of that project is to find and develop a learning model that predicts accurately, also finding a good way to augment data to become able to use complex models.

under supervision of Prof. Mahdieh Soleymani Baghshah.

Honors and Awards

- ACM-ICPC
 - 32nd Team, ICPC World Finals 2020, Moscow
 - 1st Team, Asian Regional Contest 2019, Tehran, Proceeding to ICPC World Finals 2020
 - 2nd Team, Asian Regional Contest 2018, Tehran
 - 3rd Team, Asian Regioanl Contest 2020, Tehran
- Informatics Olympiads
 - Silver Medal, IOI 2018

 30^{th} International Olympiad in Inforamatics, Tsukuba Ibrakai, Japan

- Gold Medal, INOI 2017
 - 27^{th} Iranian National Olympiad in Informatics, Tehran, Iran
- Silver Medal, APIO 2018

 12^{th} Asia-Pacific Informatics Olympiad, hosted by Russia

- Bronze Medal, APIO 2017
 - 11^{th} Asia-Pacific Informatics Olympiad, hosted by Australia
- Silver Medal, INOI 2016
 - 26^{th} Iranian National Olympiad in Informatics, Tehran, Iran

Teaching Experience

• Teaching Assistant in Data Structures and Algorithms, Fall 2019, 2021

Head of teaching assistants and responsible for defining and evaluating theoretical and practical assignments.

• Teaching Assistant in Design of Algorithms, Fall 2020, 2021

Responsible for defining and evaluating practical assignments.

• Teaching Assistant in Compiler Design, Fall 2020

Responsible for defining and evaluating final projects.

• Algorithms Instructor, Allame Helli Highschool and many other high schools

Responsible for teaching and assessment of students preparing for INOI exams.

Volunteer Experience

- Member of INOI Committee, Fall 2019 Present
 - * Iran's Team Leader at IOI 2021.
 - * Responsible for designing exams to select talented students.
 - * Responsible for conducting camps for preparing students.
 - * Affiliated with ministry of Education.
- Sharif AI Challenge, Fall 2019, Fall 2020
 - * Responsible for developing server and simulating game.
 - * Responsible for designing game.
- Head Of Quera College Data Structure Course, Spring 2019

Responsible for providing educational materials.

Languages

- Persian (Native)
- English (Fluent TOEFL [R=30, L=30, S=24, W=28])

Skills

- Programming Languages, proficient with C++/ Python/ Java and many other languages.
- Linux, Experienced in Linux shell and Bash scripts.
- Algorithms and Competitive Programming, as IOI and ICPC awards suggest.
- Software Engineering, familiar with object-oriented design patterns and other development methodologies.