Borna Barahimi

Research Interests

- o AI, Machine Learning, and Deep Learning
- Health informatics and Diagnostic informatics
- Natural language processing
- Reinforcement learning and Multi-agent systems
- o Bioinformatics and Computational Biology

Education

2018–2022 **B.Sc. Computer Science**, *University of Tehran (us news ranking: 387)*, Tehran, (Expected) Iran, *CGPA: 3.55/4 (CGPA last four semester: 3.66/4)*.

Test Scores

English IE

English IELTS Band Score 8 (L: 8.5, R: 8.5, W: 7, S: 7)

Proficiency

GRE Quant: 167, Verbal: 147, Writing: Not Reported Yet

Publications

- Cyrus 2d simulation team description paper 2019. RoboCup
- Fury 2d simulation team description paper 2016. RoboCup 2016 Symposium and Competitions: Team Description Papers, Leipzig, Germany

Awards and Honors

- Second Place in Tehran Mental Health Electronics Startup Weekend 2019, University of Tehran
- First place in Soccer Simulation League in RoboCup Asia-Pacific 2018, Kish, Iran
- Rank 389 among 145,000 participants in *the Iranian university entrance exam* 2018 for bachelor's degree
- Second Place in Soccer Simulation League in NasirCup2017, K. N. Toosi University of Technology
- Participant in Soccer Simulation League in RoboCup2017, Nagoya, Japan
- Winner of The Technical Challenge in Soccer Simulation League in *IranOpen2017*, Tehran, Iran

- First place in Soccer Simulation League in ShirazOpen2016, Shiraz University of Technology
- o Best New Team in Soccer Simulation League in RoboCup2016, Leipzig, Germany

Professional Experiences

July 2019 Backend Developer, VClinic, Tehran, Iran.

July 2021 My responsibility was designing MongoDB databases especially the ones related to electronic health record, creating API services, educating interns, on boarding of new members, interviewing, and more.

Oct 2016 Robotics Programmer, Atomic Energy High School, Tehran, Iran.

July 2019 I was responsible for designing and developing algorithms for simulated agents in order to make them behave properly in the simulated soccer field. We also used machine learning methods in some of our algorithms.

Teaching Experiences

Sep 2021 **Teacher Assistant**, *University of Tehran*, Tehran, Iran.

Present Theory of Computation Course

Aug 2020 Teacher Assistant, Karyar College, Tehran, Iran.

Present I taught underprivileged students programming (Python, C, HTML, CSS).

Volunteer Experiences

Aug 2020 **Teacher Assistant Representative**, *Karyar College*, Tehran, Iran.

Present I was responsible for holding TAs' meetings and participating in planning meetings to provide better technical education for students.

May 2019 Community Representative, Computer Science Academic Association, University

Oct 2020 of Tehran, Tehran, Iran.

Notable Projects

Parkinson's Implementation of a classification model for detecting Parkinson's disease based on **disease** online handwriting records using self-supervised and transfer learning (in progress)

detection

Clique Implementation of a classifier based on a grid-based clustering algorithm

Classifier

Compiler Development of COOL programming language compiler

Project

Suffix Tree Implementation of a tool for working with suffix trees

Skills

Programming Python, C++, R, LATEX, Ruby, JavaScript, Bash

Languages

Databases SQL, MongoDB, Redis

Web Devel- Node.js, HTML5, CSS, Express.js, Docker, React.js, Ruby on Rails, JQuery, Web-

opment pack

Data Mining numpy, pandas, scikit-learn, keras, TensorFlow

Industry Agile Development, Object-Oriented Programming (OOP), Web Development, Knowledge Model-View-Controller (MVC), REST API Development, Design Thinking

Selected Courses

o Biology Meets Programming: Bioinfor- O Data Mining: A+ matics for Beginners: Coursera

• Compiler: A+

• Database Management Systems: A+

Statistical Methods: A

General Biology: A

o Data Structures and Algorithms: A

Design and Analysis of Algorithms: A

Advanced Programming: A

References

Mr. Nader Zare, Teacher/Team Leader, Team Leader of Cyrus RoboCup Team. Email: mailto:Nader.zare@dal.ca