Amirhossein Rajabpour

Computer Eng. (CE) Dept., Amirkabir Univ. of Tech. (AUT), Tehran, Iran | Cell Phone: +98 912-0891569 |

Email: rajabpoura@aut.ac.ir and rajabpouramirhosein@gmail.com

GitHub, LinkedIn, Personal website

BSc. Transcript until Jul. 2021

Research Interests

- Artificial Intelligence
- Deep Learning
- Time Series Analysis
- Business Analytics
- Financial Markets

Education

BACHELOR OF COMPUTER ENGINEERING | <u>AMIRKABIR UNIVERSITY OF TECHNOLOGY</u> (TEHRAN POLYTECHNIC), TEHRAN, IRAN | 2018 - PRESENT

• GPA: 16.43 / 20 (3.54/4.00) – GPA (last two semesters): 18.40 (4/4)

HIGH SCHOOL DIPLOMA IN MATHEMATICS AND PHYSICS | ALLAMEH TABATABAEI HIGH SCHOOL, TEHRAN, IRAN | 2014 - 2018

- GPA: Pre-University 19.35 / 20 (4/4)
- GPA: High School 19.41 / 20 (4/4)

Technical Skills

- **Programming Languages:** Python, C, Java, Shell Scripting, Octave
- **Operating Systems:** Windows, Linux (Ubuntu)
- Artificial Intelligence: Tensorflow, Pytorch, Keras, Scikit learn, Fastai
- Database Systems: MySQL
- Web Development: Django, HTML, CSS
- Miscellaneous: Docker, Jira, Git, Latex, Numpy, Pandas, Plotly, Selenium, Xampp, Wireshark, GNS3, Arduino, Verilog, VHDL

Selected Projects

- Genetic Algorithm
 - o Implementing genetic algorithm in order to solve Super Mario game
- Constraint Satisfaction Problems
 - o Implementing CSP Backtracking, Forward Checking and MAC Algorithms in order to solve a binary puzzle
- Handwritten Digit Recognition from scratch

o Implementing a neural network from scratch with/without vectorization

• Fuzzy C-Means Clustering

Implementing the fuzzy version of the K-Means algorithm is implemented. Each data point
is not forced to belong only to a specific cluster but can belong to clusters to varying
degrees

Jpotify

 Music player written in Java that can load/save songs, create/edit/delete playlists and connect to another client and share songs

• Searching Algorithms: IDS, BBFS and A*

 Implementing searching algorithms like IDS, BBFS and A* from scratch in order to find optimal path. In this program a robot should push a piece of butter to a plate and the robot should do this optimally with no extra moves

Teaching Experiences

TEACHING ASSISTANT | ALGORITHM DESIGN | OCT 2021 - PRESENT

- · Under the supervisor of Alireza Bagheri, Amirkabir University of Technology
- grading assignments
- · Taking quizzes

TEACHING ASSISTANT | ALGORITHM DESIGN | JAN 2021 - JUN 2021

- · Under the supervisor of Alireza Bagheri, Amirkabir University of Technology
- · Defining and grading assignments
- · Taking quizzes

Working Experiences

R&D SOFTWARE ENGINEER | CROUSE PJS CO. | OCT 2021 - PRESENT

· Working on an Artificial Intelligence Vision problem

DEVOPS ENGINEER INTERN | GRAPH CO. | NOV 2020 - APR 2021

· Provide technological solutions in the field of e-commerce, financial and credit services

Honors & Awards

• Achieved top 1% place among more than 140,000 applicants of the Nationwide University Entrance Exam for B.Sc. in Math. and Physics (2018)

Languages

• **Persian**: Native

• **English**: Professional working proficiency

• **German**: Professional working proficiency (B2)

^{*}To review my other projects (and their descriptions) check my Personal website

*To review my projects and grades check my <u>Personal website</u>