Mahtab **Farrokh**

UNDERGRADUATE SOFTWARE ENGINEERING

424 Hafez Ave. Tehran Iran

(+98)9120764487 | ✉ mahtab.farrokh@gmail.com | ⌂ mahtabfarrokh.github.io | mahtabfarrokh | mahtab-farrokh

Education

AmirKabir University of Technology (Tehran Polytechnic)   *Tehran, Iran*

B.S. IN COMPUTER SOFTWARE ENGINEERING   *2015 - PRESENT*

GPA: 3.64/4 (18.19/20) for 137 units until now

Farzanegan 1 High School   *Tehran, Iran*

DIPLOMA IN PHYSICS AND MATHEMATICS DISCIPLINE   *2011 - 2015*

GPA: 3.87/4 (19.36/20)

Skills

Programming	Python3, C/C++, Go, Node.JS, LaTeX, JAVA, Matlab, AVR Assembly, VHDL, Verilog
Web	React, HTML5, CSS, JavaScript, Express with Node.JS, Django with Python
Databases	MySQL, MongoDB
Frameworks and Tools	Keras, Tensorflow, Numpy, Scikit, Pandas, Qt
Operating Systems	Ubuntu, Windows

Work Experiences

Tebinja   *Tehran, Iran*

ARTIFICIAL INTELLIGENCE DEVELOPER   *Oct. 2016 - PRESENT*

- We have implemented a symptom checker system which is web-based. For this system, we merged results of 4 algorithms: bayesian, decision tree, DQN(Deep Q-network), feedforward neural network. Furthermore, we are working to implement a price recommender for airline tickets.

Research Experiences

Amirkabir University of Technology   *Tehran, Iran*

B.Sc. PROJECT   *Jan. 2019 - PRESENT*

- I work on a multi-label classification algorithm using link prediction for Improving symptom checker system under the supervision of Prof. Amir Haeri.

RESEARCH AND DEVELOP I1820   *Oct. 2017 - Jan. 2018*

- Implementing a middleware platform for IoT based on agent approach under the supervision of Prof.Bakhshi, AoLab

Teaching Experiences

Amirkabir University of Technology   *Tehran, Iran*

TEACHING ASSISTANT   *2016 - PRESENT*

- Signals & Systems, Under Supervision of Prof.Rasti
- Artificial Intelligence & Expert Systems, Under Supervision of Prof.Nikabadi
- Engineering Statistics, Under Supervision of Prof.AmirHaeri
- Data Structure & Algorithms, Under Supervision of Prof.Dehghan
- Introduction to Programming, Under Supervision of Prof.Bakhshi

Amirkabir University of Technology   *Tehran, Iran*

TEACHER   *2017 - 2018*

- Introduction to Python3 programming

Interests

Machine Learning, Deep Learning, Big Data, Computer vision, CNN, AI Applications in Medical science

Online Courses

Neural Networks and Deep Learning   *Certificate*
BY DEEPLEARNING.AI   *Aug. 2018*
Grade Achieved: 100.0%

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and   *Certificate*
Optimization
BY DEEPLEARNING.AI   *Sep. 2018*
Grade Achieved: 97.6%

Structuring Machine Learning Projects   *Certificate*
BY DEEPLEARNING.AI   *Sep. 2019*
Grade Achieved: 95.8%

Convolutional Neural Networks   *Certificate*
BY DEEPLEARNING.AI   *Sep. 2019*
Grade Achieved: 98.9%

Machine Learning
BY STANFORD UNIVERSITY   *Feb. 2018*
Grade Achieved: 96.1%

Honors & Awards

2019	**Qualified to Direct Admission to graduate school (M.Sc.)**, Computer Engineering Department, AUT
2013	**Semi-finalist**, National Mathematics Olympiad
2015	**Ranked top 0.4%**, among more than 180,000 students participated in the nationwide entrance examination of undergraduate studies in Iranian universities
2007-2014	**Member of National Organization for Development of Exceptional Talents**, Nodet
2011	**Accepted for 2nd level Kharazmi awards assessments**, Built a recyclable hovercraft

Notable Projects

2019	**Message Broker**, Implemented For Distributed Systems course project by Go	*Project*
2019	**Food Ordering website**, Implemented For Web Programming course project by React and Node.js and mongoose	*Project*
2018	**NUMEX Interpreter**, An interpreter using functional language named Racket for Programming Languages course project	*Project*
2018	**Time Series Prediction**, Using srima model	*Project*
2017	**C to SAYEH Compiler**, A compiler for SAYEH processor	*Project*
2017	**Classical Search and Local Search algorithms**, AI Course Project by Python, implementation of BFS, DFS(unlimited, limited, iterative), A*, bidirectional, genetic, hill climbing, simulated annealing	*Project*
2016	**Search Engine**, Data Structure Course Project by Python, implementation of BST, AVL (Balanced BST), TST, Balanced TST, Trie and HashMap using chaining approach based on LinkedList	*Project*

Extracurricular Activity

SSC   *Tehran, Iran*
MEMBER   *2017 - 2018*
• Elected as a member of Students Scientific Chapter(SSC), CEIT Department, Amirkabir University of Technology

Linux Festival   *Tehran, Iran*
MEMBER OF EXECUTION COMMITTEE   *Spring 2017 and 2016*
• 9th and 8th National AUT Linux Festival

ACM ICPC   *Tehran, Iran*
MEMBER OF EXECUTION COMMITTEE   *Fall 2018 and 2017 and 2016*
• 18nd, 17nd, and 16nd International AUT ACM ICPC

DMC   *Tehran, Iran*
MEMBER OF EXECUTION COMMITTEE   *Fall 2017*
• 1st Data Mining Cup

References

Professor Maryam Amirhaeri ,	Assistant professor	Email: haeri@aut.ac.ir
Professor Bahador Bakhshi,	Assistant professor	Email: bbakhshi@aut.ac.ir
Professor Ahmad Nikabadi,	Assistant professor	Email: nickabadi@aut.ac.ir