

Reza Tavasoli

CONTACT INFORMATION

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RESEARCH INTERESTS

- Deep Learning
- Computer Vision
- Machine Learning
- Artificial Intelligence in Medicine

EDUCATION

- **Amirkabir University of Technology (Tehran Polytechnic)**, Tehran, Iran
(Ranked 2nd among all Iranian universities based on QS World University Rankings 2021)
B.Sc., Computer Engineering, September 2016 - Present
Last Two Years' GPA: **17.44/20 (3.74/4)**
Overall GPA: **16.54/20 (3.41/4)**
- **Danesh High School**, Tehran, Iran
Diploma in Mathematics and Physics 2012 - 2016
Overall GPA: **19.68/20**

RELEVANT COURSEWORK

- **Artificial Intelligence** (19.32/20)
- **Algorithm Design** (19.25/20)
- **Engineering Statistics** (18.05/20)
- **Database Design** (18.1/20)
- **Computer Networks** (19.6/20)
- **Information Security** (18.9/20)
- **Software Engineering** (18/20)
- **Operating Systems** (18.3/20)

TEACHING EXPERIENCE

Amirkabir University of Technology, Tehran, Iran
Teaching Assistant

- Principles of Artificial Intelligence, Instructor: Fatemeh Mousavi (Fall 2020, Spring 2020)
- Algorithm Design, Instructors: Prof. Alireza Bagheri (Fall 2020)
- Database Design, Instructor: Prof. Saeede Momtazi (Fall 2020)
- Internet of Things, Instructor: Prof. Mehdi Rasti (Fall 2020)
- Microprocessors and Assembly Language, Instructor: Prof. Hamed Farbeh (Fall 2020, Spring 2020, Fall 2019)
- Computer Architecture, Instructor: Prof. Hamed Farbeh (Spring 2020, Fall 2019)
- Information Security, Instructor: Prof. Nastoo Taheri Javan (Spring 2020)
- Computer Networks, Instructor: Prof. Masoud Sabaei (Spring 2020)

RESEARCH EXPERIENCE	Research Assistant , Amirkabir University of Technology (April 2020 - Present) Building a software to detect dental cysts from dental radiography images using deep learning. Supervisor: Prof. Hamed Farbeh	
WORK EXPERIENCE	<ul style="list-style-type: none"> • Freelance Mobile Application Developer (2019 - Present) Building native iOS apps with Swift and hybrid apps with Flutter • Database Developer Intern (June - August 2019) Worked as a SQL Server Backend Developer 	
HONORS AND REWARDS	<ul style="list-style-type: none"> • Featured mobile application built with Flutter Framework that was showcased on Flutter Weekly, 2020. • Achieved top 0.4% place among all applicants of the Nationwide University Entrance Exam for B.Sc. in Engineering (Approximately 160000 applicants), Iran, 2016. • Achieved top 0.5% place among all applicants of the Nationwide University Entrance Exam for B.Sc. in English (Approximately 115000 applicants), Iran, 2016. 	
SKILLS	<ul style="list-style-type: none"> • Programming Languages: Python, Dart, Java, Swift, C++ • Database Systems: PostgreSQL, SQL Server, MySQL • Mobile Application Development: Flutter, iOS • Miscellaneous: OpenCV, Bash Script, Git, L^AT_EX 	<ul style="list-style-type: none"> • AI and Data Science: Tensorflow, Numpy, Matplotlib, Pandas • Web Development: HTML, CSS, Bootstrap, Django
SELECTED PROJECTS	<ul style="list-style-type: none"> • Malaria Detection from Blood Cell Images Implemented a convolutional neural network to detect Malaria from thin blood slide images, based on the dataset provided by The United States National Library of Medicine. Github Link: github.com/tavasolireza/CNN-Malaria-Detection • Landscape Images Colorization Implemented a deep convolutional neural network to colorize black-and-white landscape images. Github Link: github.com/tavasolireza/Landscape-Images-Colorization • Deep Sudoku Solver Implemented with OpenCV and Tensorflow, identifies a sudoku puzzle from the the provided image and solves it. Github Link: github.com/tavasolireza/Deep-Sudoku-Solver • Real-Time Face Anonymizer Implemented with OpenCV and pretrained Face Detection Model, anonymizes faces (blur or pixelate) from the still images or the webcam camera. Github Link: github.com/tavasolireza/Real-Time-Face-Anonymization 	
LANGUAGES	<ul style="list-style-type: none"> • Persian (Farsi): Native • English: Fluent - TOEFL iBT: 113/120 (Reading: 28, Listening: 28, Speaking: 29, Writing: 28) 	

REFERENCES

- **Hamed Farbeh, Assistant Professor**
Computer Engineering and IT Department, Amirkabir University of Technology
Email: farbeh@aut.ac.ir
- **Saeede Momtazi, Assistant Professor**
Computer Engineering and IT Department, Amirkabir University of Technology
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- **Fatemeh Mousavi, Instructor**
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- **Alireza Bagheri, Associate Professor**
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- **Mehdi Rasti, Assistant Professor**
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- **Nastooch Taheri Javan, Research Professor**
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