

Mohammad Amin Shahcheraghi

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Education

M.Sc. in IT Engineering, University of Tehran (**Ranked 1st university in Iran**) 2020 – Mar 2025

- Thesis Title: Smart Autism Screening using a musical game
- Overall GPA: 15.3 (out of 20)
- Selected Courses: Neural Networks: 18.2 (out of 20), Statistical Inference: 17 (out of 20), Biological Computing: 18.5 (out of 20)

B.Sc. in Computer Engineering - Software, University of Science & Culture 2015 – 2019

- Overall GPA: 16.42 (out of 20)

Research Interests

- Machine Learning
- AI in Healthcare
- Serious Games
- AR/VR
- Human-Computer Interaction
- NLP
- Social Networks
- Inter-Disciplinary Research with AI
- Data Science
- Cognitive Science
- Trustworthy AI

Technical & Research Experience

Research Assistant 2020 – Mar 2025

Lab of Robotics & Artificial Intelligence at University of Tehran

- Thesis Title: Smart Autism Screening using a musical game
A game based on musical instruments that children can interact and play with in different stages. It can distinct autistic children from normal ones with high accuracy using machine learning by analyzing their play records as data.

Lecturer Feb 2025- Jul 2025

University of Science & Culture, Iran

- Teaching Game Development Laboratory course in undergraduate computer science department at University of Science & Culture

Lecturer Feb 2024- Jul 2024

University of Science & Culture, Iran

- Taught Software Engineering Laboratory course in undergraduate computer science department at University of Science & Culture

Research Assistant

Aug 2021- Feb 2022

Pars Cognition, Iran

- Under supervision of my supervisor developed a serious game to assess and enhance sustained attention ability. It helps individuals with concentration problems to maintain focus on relevant information while ignoring irrelevant information over extended periods. It collects data from individuals while playing then sends it to a server to analyze the data. The game has dynamic difficulty adjustment for each player. The game is deployed in rehabilitation clinics and schools for therapeutic use.

<https://www.maghzineh.com/gamesAttention.aspx>

Project

Sep 2022- Feb 2023

University of Tehran, Iran

- In my Neural Networks course I worked on a project related to fake news detection in different news texts, we use different methods of NLP and knowledge of graphs to enable AI to detect fake news without human supervision.

Project

Sep 2022- Feb 2023

University of Tehran, Iran

- Detection and labeling of chess pieces on a board from different camera angles, record and save all states of the entire match using deep learning and AI.

Project

Sep 2021 - Feb 2022

University of Tehran, Iran

- Studying the effect of social media activity and posts on prediction of stock market prices with AI.

Crawling various data from sources (across different social media platforms) such as sentiment of comments about a certain topic then using it as features for AI models to predict stock market prices vs prediction with only financial data in Iran's stock market.

Project

Sep 2021- Feb 2022

University of Tehran, Iran

- Using machine learning and neural networks to train models for prediction of air quality in the future days by using real data of metropolitan cities and based on multiple other features such as temperature and wind speed.

Examiner

Summer 2019

University of Science & Culture, Iran

- Member of the committee of examiners of undergraduate student's thesis defending at University of Science & Culture

Languages

- English: full professional proficiency
Test: TOEFL IBT
Total Score: 105 (Reading: 28 Listening: 29 Speaking: 26 Writing: 22)
- French: elementary working proficiency
- Persian: Native

Work Experience

Game Developer Jun 2017 – Feb 2018

Glim Games, Iran

- As main programmer and designer in development of android mobile games. One of the projects that I developed is linked below. It is published in Iranian market for android apps and has more than 100,000 downloads.

<https://cafebazaar.ir/app/com.emc.asghartycoon?l=en>

Tools: C#, Unity Game Engine

Game Developer 2019 - 2020

Iran

- Designer and main programmer in development of a mobile real-time multiplayer game.

Tools: Photon Unity Networking, C#, Unity Game Engine

AR Application Developer Sep 2018 - Feb 2018

Science and Technology Park in University of Science & Culture, Iran

- I was in charge of development an augmented reality application that would show and provide further information by additional reality about university research projects that were presented on a wall using an infographic.

Tools: Unity Vuforia Augmented Reality Package, C#, Unity Game Engine

Award & Honors

- Ranked 8th in national entrance exam of universities for IT Engineering Master's 2020
- Full Master's scholarship recipient from University of Tehran 2020
- Ranked 4th among class of 2019 in University of Science & Culture 2019
- Awarded Master's position in University of Science & Culture 2019
- Accepted at first stage of National Mathematics & Computer Olympiad 2014
- Accepted at first stage of National Computer Olympiad 2013

Publication

Smart Autism Screening Using a Musical game

Under Preparation

Skills

- Programming languages : Python, C#, C++, C, Node JS, HTML, CSS, Java, JS , R, MATLAB
- Tools and Frameworks: Keras, Pytorch, TensorFlow, Scikit-Learn, Numpy, Pandas, Matplotlib, Seaborn, OpenCV, OpenGL, Git, , MongoDB, Unity Game Engine, Unity Vuforia Augmented Reality Package, Unity VR, Adobe Photoshop, Gephi, Microsoft SQL Server, Apache Lucene, Photon Unity Networking , Gns3, FPGA, Arduino, Altera

References

Dr. Hadi Moradi

Iran, University of Tehran

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Dr. Azadeh Tabatabaei

Iran, University of Science & Culture

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Dr. Alireza Rezvanian

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Hobbies

Chess, Swimming, Soccer