Amir Mahdi **Mohamadian**

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"The only way to do great work is to love what you do."

Education

College of Electric and Computer Engineering, University of Tehran *Tehran, Iran*

B.Sc. in Computer Engineering (Software Engineering major) *Sep. 2018 - present*

- Cum. GPA: 16.11/20 (3.2/4)
- Related Courses: Technical English(4/4) · Internet Engineering(4/4) · Software Engineering(4/4) Systems Analyzing and Designing(3.5/4) · Database(3.5/4) · Artificial Intelligence(3.3/4) · Advanced Programming(3.1/4) E-learning(3.5/4) · Data Structures(3.5/4)
- Thesis topic: "Lab Administration & Student Supervision System"
- Thesis supervisor: Prof. F. Taghiyareh

Diploma in Mathematics and Physics *Tehran, Iran*

2014 - 2018

Research Interests

- **Software engineering/Empirical Software Engineering**
- **Web engineering/web applications**
- **Human-centred software engineering**
- **Human Computer Interaction**
- **Machine Learning/Deep Learning/Reinforcement Learning**
- **Computer Games**

Teaching Experience

University of Tehran ACM Student Chapter

Front-end engineering Course Supervisor Summer of Code *Jul. 2023 - Oct. 2023*

Overseeing course quality assurance and the meticulous process of appointing a qualified course instructor, along with the selection of mentors for the program.

Front-end engineering Course Instructor Summer of Code *Jul. 2022 - Oct. 2022*

Instructed a Front-end Engineering course to a cohort of 16 students during the summer, encompassing foundational topics in HTML, CSS, and JavaScript, as well as an in-depth exploration of the ReactJS framework and software architecture principles.

Digital Design Course Instructor Summer of Code *Jul. 2021 - Oct. 2021*

Delivered a comprehensive course in digital design, encompassing both fundamental principles and advanced topics within Adobe Photoshop.

University of Tehran

Teaching Assistant Internet Engineering, Prof. E. Khamespanah *Jan. 2023 - present*

Conceptualized and developed two pivotal projects for the course, accounting for 25% of the total course evaluation, inclusive of the provision of comprehensive test data, intricate UI designs, back-end APIs, and a comprehensive, step-by-step instructional guide. Additionally, actively assessed and evaluated student submissions, providing feedback and grading based on established criteria.

Teaching Assistant Technical English, Prof. F. Fatemi *Sep. 2021 - Sep. 2022*

Designed and graded homework. Graded exams.

Honors & Awards

2021	**Member,** University of Tehran ACM Student Chapter	*Tehran, Iran*
2020	**Member,** University of Tehran ACM Student Chapter	*Tehran, Iran*
2018	**Ranked Top 0.2% in Konkour,** National Organization of Educational Testing (NOET)	*Tehran, Iran*

Research Experience

Under the supervision of Prof. F. Taghiyareh　　　　　　　　　　　　　*University of Tehran*

RESEARCH ASSISTANT　　　　　　　　　　　　　　　　　　　　　　　　　*Aug 2023*

Collaborated on research focused on analyzing and enhancing attention rates for educational videos.

Professional Developements

Supervised Machine Learning: Regression and Classification, Andrew Ng　　*Stanford University, Coursera*

AN ONLINE MACHINE LEARNING COURSE　　　　　　　　　　　　　　　　　　*2023*

Learned to build & train supervised machine-learning models for prediction & binary classification tasks, including linear regression & logistic regression. I have also learned to Build machine learning models in Python using popular machine learning libraries NumPy & scikit-learn.

Advanced Learning Algorithms, Andrew Ng　　　　　　　　　　　　　*Stanford University, Coursera*

AN ONLINE DEEP LEARNING COURSE　　　　　　　　　　　　　　　　　　　*2023*

Learned to build and train a neural network with TensorFlow to perform multi-class classification, build and use decision trees and tree ensemble methods, including random forests and boosted trees, and also apply best practices for machine learning development so that my models generalize to data and tasks in the real world.

Unsupervised Learning, Recommenders, Reinforcement Learning, Andrew Ng　　*Stanford University, Coursera*

AN ONLINE UNSUPERVISED LEARNING COURSE　　　　　　　　　　　　　　　*2023*

Learned to use unsupervised learning techniques: including clustering and anomaly detection, build a deep reinforcement learning model, and also build recommender systems with a collaborative filtering approach and a content-based deep learning method.

QToppia

DIGITAL CONVENIENCE FOR EVERYDAY ITEMS WITH QR-CODE-BASED INTERFACE WEB APP　　*2022 - present*

QToppia is a personal passion project that brings the virtual world into everyday objects. This innovative concept leverages QR codes as an interface, seamlessly integrating digital features into non-digital items. For instance, take the 'Habit Making Mug,' a prime example of this technology. This unique mug is equipped with a QR code, enabling users to effortlessly track their habits, access a daily to-do list, and monitor their water intake. By cleverly using drink counts as indicators for specific habits, each sip becomes a step toward achieving personal goals. Also, it leverages Chat GPT features to provide a much smarter environment for the users.

QGames

PERSONALIZED BOARD-GAME RECOMMENDATIONS, PROGRESS TRACKING, AND REWARDS, ALL IN ONE APP!　　*2023 - present*

A passion project inspired by QToppia, designed to enhance the board game cafe experience. This app provides personalized game recommendations based on users' past games and preferences, allowing them to track their progress and achievements for a richer gaming journey. Additionally, it introduces gamification with QPoints, rewarding engagement with discounts on future purchases, enhancing each visit. With our app, board game cafes can create memorable experiences, build customer loyalty, and elevate their business to new heights.

LevelUp　　　　　　　　　　　　　　　　　　　　　　　　　　　　　*Tehran, Iran*

ELEVATE WORK QUALITY AND MOTIVATION AMONG WORKERS USING A GAMIFIED MODEL　　*2022*

Introducing an innovative gamification model designed to enhance work quality, especially among developers. Our innovative approach transforms the traditional work environment into an engaging and rewarding experience.

Teamyab　　　　　　　　　　　　　　　　　　　　　　　　　　　　　*Tehran, Iran*

CONNECTING JOB SEEKERS WITH THEIR DREAM CAREERS AND HELPING COMPANIES FIND THEIR IDEAL TALENT.　　*2022 - present*

A startup dedicated to transforming the job market for both job seekers and companies. Our platform empowers job seekers to assess their skills and preferences comprehensively, enabling them to find the perfect job match. We offer a dynamic evaluation system that goes beyond traditional resumes, ensuring a more accurate and rewarding job search experience. For companies, our platform provides a game-changing solution for talent acquisition. We identify candidates with the highest probability of aligning with the company's needs and culture, streamlining the hiring process, and fostering long-term success.

Work Experience

Teamyab　　　　　　　　　　　　　　　　　　　　　　　　　　　　　*Tehran, Iran*

FRONT-END CHAPTER LEAD & SUPERVISOR　　　　　　　　　　　　　　　　*Apr. 2022 - Present*

- Effectively overseeing a team of six developers to address and fulfill the organization's intricate business requirements.
- Skillfully executing the development of the TeamYab web application utilizing ReactJS while adhering to industry best practices and standards.
- Providing steadfast support to the team and formulating a structured learning roadmap to facilitate the onboarding and professional growth of new developers.
- Strategically orchestrating sprints and quarterly planning sessions to align with and fulfill the dynamic business requirements and objectives.

Shopino
Tehran, Iran

Senior Front-End Engineer
Jul. 2023

- Undertook the challenge of acquiring proficiency in Svelte and Svelte Kit from the ground up, while meticulously adhering to industry best practices. This journey culminated in a comprehensive redesign and complete refactoring of their application, incorporating server-side rendering to enhance the overall user experience.

Digikala
Tehran, Iran

Front-End Engineer
Sep. 2022 - Mar. 2023

- Dedicatedly worked beyond standard hours to develop features across product lines, prioritizing project success and client satisfaction. Led user-facing feature development in Digikala's Operations division, particularly in Delivery and Fulfillment Center functions. Contributed to Digikala's growth by creating new pages and features for Digikala Printer Tools V2 and V3, using ReactJS and ReactTS for exceptional user experiences. Prioritized code efficiency and maintainability while crafting new elements for Phoenix PWA. Collaborated effectively with cross-functional teams, gaining a holistic understanding of project requirements. Demonstrated proficiency in Redux and context management for efficient state control and application scalability in React-based projects.

Baamtest
Tehran, Iran

Freelance Front-End Engineer
Oct. 2021 - May. 2022

- Actively contributed to the enhancement of the Baamtest website, a ReactJS-based platform, by introducing new features, pages, and components to expand its functionality and user experience.
- Leveraged advanced debugging techniques, optimization strategies, and code refinement practices to proactively address issues within the Baamtest website. This process not only boosted the site's performance but also improved the overall codebase by enhancing readability and promoting consistency in coding practices.

Ganje
Tehran, Iran

Junior Front-End Engineer
Aug. 2021 - Mar. 2021

- Efficiently developed and maintained new features for Ganje's ReactJS web app, ensuring its relevance to evolving business needs. Improved code quality, performance, and readability while creating a tailored Admin Panel using Bootstrap and JQuery. Collaborated with cross-functional teams for insights and acquired expertise in Django, Bootstrap, and JQuery to optimize the user experience and implement interactive features.

Notable Academic Projects

IEMDB
Internet Engineering

An IMDB replica using Java Spring & ReactJs

Developed by a team of two, a replica of the IMDb website. We used Java Spring for the back-end and ReactJS for the front-end. Users can explore movie information and create personalized wish lists. We have used tools like CI/CD pipelines, JDBC, JUnit, Github Oauth apps, etc.

Super Mario
Advanced Programming

A Super Mario game clone

A Super Mario game clone written fully in C++.

PONG
Embedded systems

An Android censor based Pong game

A pong game replica, written in Java Android. It uses device sensors to handle the movement of the rocket.

Hiragana
Artificial Intelligence

Hiragana language Neural Network hand-written recognizer

A trained neural network to recognize Hiragana hand-written language using TensorFlow.

Indiana jones
Artificial Intelligence

Informed and Uninformed search

Solving a puzzle using Informed and Uninformed search.

Skills

Languages	Persian: Native · English: Professional working proficiency · French: +1 year Duolingo streak
Programming/Software Engineering	JavaScript, TypeScript, C, C++, GoLang, Python, Java Clean Code, Object-Oriented & Functional programming, Agile Software Development Testing & Debugging, SSR & CSR, Data Structures & Algorithms, UML
Web Development	HTML, CSS, JavaScript, JQuery, Bootstrap, Tailwind, MUI, TypeScript, SASS ReactJs, ReactTs, NextJs, Svelte, Svelte Kit, Axios, Redux, Context, Twig JSON, NodeJs, DJANGO, SQL, MongoDB, ExpressJs, Spring, REST API, Responsive Web Design Socket Programming, Postman, Nginx
AI/Machine Learning/Deep Learning	Python, Jupyter Notebook, Numpy, Pandas, Matplotlib, Scikit-learn, TensorFlow
Digital Design	UI/UX, Figma, Adobe Photoshop, Adobe Illustrator, Adobe Premiere Pro
Technologies/Operating Systems	Git, Docker, Makefile · Linux, Windows