Mahdi Moeini

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SUMMARY

Energetic and hardworking Computer Engineer with a keen interest in solving mathematical and algorithmic challenges. Possessing 2 years of experience in the software development field, I am looking to leverage my theoretical and practical knowledge in a professional environment.

Top Skills: Python, Java, Machine Learning, Data Science, AWS (Certified), Spring, SQL

SKILLS

- **Programming Languages**: Knowledgeable in Python, Java, C++, MATLAB, and Sufficient knowledge of JS
- **Industry Skills**: Machine Learning, Data Preprocessing, Data Visualization, Software Testing, Database management, Cloud Computing, Hands-on Deep Learning
- **Technologies**: Spring Boot, JPA, JUnit, Hibernate, Maven, Selenium, MySQL, SQL, Pandas, NumPy, PyTorch, TensorFlow, Scikit-Learn, Matplotlib, AWS (Certified)
- **Terminologies**: Proficient in Object-Oriented Programming (OOP), familiar with Agile and CI/CD principles
- **Soft Skills**: Collaborative Teamwork, Analytical Problem-Solving, Strategic Critical Thinking, Dynamic Presentation skills

WORK EXPERIENCE

Software Developer, *Toranj Innovation Technologies*
May 2021 – June 2022

- Collaborated efficiently with the backend team in launching the Medx project with 10000 clients used as a web platform for health insurance companies to process their financial tasks
- Developed and debugged microservices in Java language for Medx project in MVC architectural pattern and Spring framework
- Coded User Acceptance Tests REST APIs and connected them to the FitNesse framework
- Shared information on Scrum sessions to evaluate and improve the projects

Embedded Software Developer, *Hoom Co*
Apr 2020 – Mar 2021

- Worked on IoT protocols such as MQTT and BLE and implemented them on ARM microcontrollers in C and C++ languages, which led to the development of a smart door locker controlled by Bluetooth through online software for Hoom Co with 1000 clients.
- Designed and coded IoT Gateway, taking client commands with BLE and sending them to the server with MQTT to manage multiple connections to the smart devices
- Researched and gathered information on new IoT technologies for designing new IoT devices

Volunteer instructor of Signals and Systems Course, *Iran University of Science and Technology*
Jan 2020 – Mar 2020

- Instructed MATLAB
- Designed and marked the course projects
- Provided instructing materials for the course

PROJECTS

- Implemented the back-end side of a mini online shop with Spring Boot, JPA, and JWT in a monolithic and microservice architecture that can handle 1000 customers
- Implemented fundamental Computer vision image filters (Bilateral filter, Gaussian filter, etc.) from scratch with Python and NumPy and also Numba, resulting in a remarkable 50% increase in processing speed
- Implemented Python-based web scraping with Selenium to automate grade entry, feedback generation, and class list extraction on the D2L platform at Memorial University, reducing manual data entry time by 75%
- Implemented Adaptive IIR filter for frequency estimation and tracking with MATLAB

EDUCATION

Master of Computer Engineering (Thesis), ***Memorial University of Newfoundland*** (GPA: 9.05/10)
Sept 2022 – Sept 2024

- Conducted an in-depth exploration of Brain-Computer Interfaces, specifically focusing on EEG signals. Utilized Machine Learning techniques for data analysis and interpretation
- Designed and executed an EEG experiment involving 15 healthy participants to investigate the continuous control paradigm in motor imagery
- Used Technologies such as Pandas, NumPy, Scikit-Learn, Matplotlib, and Compute Canada Service to implement and run the pipeline

Bachelor of Electrical Engineering, ***Iran University of Science and Technology***
Sept 2017 – Sept 2022

CERTIFICATIONS

- Achieved the certification of Amazon Web Services (AWS) Cloud Practitioner

HONORS AND AWARDS

- Recipient of the School of Graduate Studies Fellowship from Memorial University of Newfoundland