

Abolfazl MOSLEMIAN

SOFTWARE DEVELOPER | ML & DATA SCIENCE SPECIALIST

Phone: +989129537270 | Email: abowfzl@gmail.com

[LinkedIn](#) | [Personal Website](#) | [Stack Overflow](#) | [GitHub](#)

SUMMARY

I am a self-motivated software developer and machine learning specialist with skills in creating maintainable, cloud-based applications using the .Net platform. I am proficient in structured design, software engineering, and production environments. I am also interested in AI, deep learning, machine learning, and neural networks. My career goal is to advance AI applications in various fields and software development ecosystems.

RESEARCH EXPERIENCE

- **Smart Software Lab** Nov 2023 – Present
Qom University, Qom, Iran
 - Developing machine learning algorithms for personalized travel planning in the Travel Adviser project
 - Utilizing ChatGPT, GPT4All, LangChain, and Neo4j to enhance Travel Adviser project
 - Gaining hands-on experience in AI, natural language processing, and data analysis, preparing for advanced research
 - Being experienced in Deep Learning Algorithms for Classifying

EDUCATION

- **B.Sc. Computer Engineering** Sep 2019 – Sep 2024
Qom University, Qom, Iran
 - Ranked among the top 10% of faculty undergraduate students.
 - Pursued advanced studies in machine learning, artificial intelligence, large language models, deep learning, neural networks, and image processing.
 - Engaged in university projects such as ChatGPT, LLM, Image recognition, and graduate-level research collaborations.
 - Grade: A
 - a) Basics of computational intelligence: 19/20
 - b) Web Programming: 20/20
 - c) Principles of database design: 20/20
 - d) Algorithm design: 15.5/20
 - e) Software engineering: 18/20
 - f) Basics of IOT: 18.5/20
- **Mathematics Diploma** Sep 2016 – Jun 2019
Saniefar Governmental Leading High School, Tehran, Iran
 - Grade: A+

HONORS AND AWARDS

- **Iran National University entrance for B.Sc 2019**
Ranked top 0.5% (over 200,000 students)

SKILLS

- **Programming Language:**
 - Python:
 - NumPy, TensorFlow, Pandas, Scikit-learn, Matplotlib, Plotly, PyTorch, Keras
 - .Net Core and Asp .Net Core:
 - Web platforms, Web API Development
- **Database**
SQL Server, PostgreSQL, My SQL, Elastic, Redis
- **Software Skill**
Arduino, Cisco Packet Tracer, Proteus, Xilinx ISE Design Suite
- **Soft Skills**
Solving problems, Adaptability, Team collaboration, Innovative mindset
- **Methodologies:**
Agile, Scrum, Continuous Integration/Continuous Deployment (CI/CD)
- **Other Skills**
Data Structure, Git, Unit Tests, Docker, DevOps

WORK EXPERIENCE

- **Software Developer** Apr 2023 – Oct 2023
Exbito, Tehran, Iran
 - **Unit Testing:**
 - Developed comprehensive unit tests for new and existing projects.
 - **Code Refactoring:**
 - Refactored code and applied design patterns for clean architecture.
 - **Project Migration:**
 - Migrating from previous Python project to .Net.
 - **Infrastructure Monitoring:**
 - Implemented Grafana for real-time infrastructure monitoring, ensuring 99% uptime.
 - **Identity Management:**
 - Set up an identity server for user authentication and API accessibility.
 - **Financial Project:**
 - Designed and developed a new financial application to monitor balance usage.
 - **API Development:**
 - Developed new versions of APIs in .Net.
 - **Dashboard Creation:**
 - Built Dashboards in Kibana for application monitoring.
 - **Cron Job Migration:**
 - Migrated and improved cron jobs to .Net background services, making them loggable and testable.

- **Backend Developer**

Sep 2021 – Apr 2023

Mootantroo, Tehran, Iran

- **Image Upload Project:**
 - Developed a system for uploading and resizing images using Amazon S3 and Minio, integrating the process into the main application to generate URLs.
- **Developed a new Restful API from (MVC) to CQRS (MediatR) Pattern:**
 - Implemented authentication, refresh token, exception handling, and logging with Serilog (elastic formatted to log in to Kibana).
 - Use TraceId for error tracking.
 - Refactored services and optimized queries.
 - Switch from sync to async and tuning queries and prevent running a query multiple times for one result.
 - Developed a 3-layer distributed caching (Redis - EF - memory).
 - Decoupled domains from a previous monolithic and spaghetti project for micro-service and DDD ORM.
- **Built internal APIs based on the CQRS pattern to contribute with other middleware like (financial and CRM)**
- **Barcode Scanning:**
 - Implemented barcode for scanning and processing product barcodes, ensuring accurate inventory management.
- **Performance Optimization:**
 - Performance tuning in checkout pages and improving it up to 10 seconds.
 - Excel upload performance tuning on the admin side: receive Excel, process it in the background with Semaphore, and send a notification for the result.
 - Improve performance and refactor discount services to apply and check requirements by running a query only once in each request.
- **Concurrency Management:**
 - Handled concurrency and data integrity issues with SQL transactions and EF.
- **Payment Transaction:**
 - Developed and optimized payment transactions on SQL in EF and LinqToDb.
 - Implement stored procedure (SQL) on the project for continuous work.
- **Algorithms:**
 - Implement a delivery time-scope algorithm based on product delivery and transit time, considering holidays and the time scope in which the warehouse could not receive products from the seller.
 - Implement an algorithm for creating seller packages based on orders and delivery times.
- **Cross-Selling Features:**
 - Developed new features to display cross-selling and related products on product detail pages, increasing customer engagement and potential sales.

- **Junior Backend Developer**

Sep 2020 – Sep 2021

Mootantroo, Tehran, Iran

- **Crawler Project:**
 - Developed a web crawler using HTTP client factory design to gather business data.
- **Legacy API Integration:**
 - Designed and fixed over 20 endpoints for a legacy Android app using existing PHP APIs without modifying the app.
- **Bug Fixing:**

- Conducted a two-month bug-fixing sprint for the shopping and admin panel before the main project launch.
 - Event Consumption:
 - Set up a domain-driven design project to consume events Kafka to update products on the Elastic stack.
 - Performance Optimization:
 - Performance tuning and optimize 70% of home page load time.
 - Reduce up to 90% of Redis connection per request for load homepage.
 - Warehouse Location:
 - Developed factors and product labels for determining warehouse locations.
 - Delivery Estimation:
 - Developed schedule time-scope to estimate delivery date to customers.
 - Dynamic Brand Page:
 - Developed a brand page with sorting and search functionalities in English and Persian.
 - Fulfillment Features:
 - Develop, improve, and fix fulfillment, warehouse, and supply feature bugs.
 - Seller Payouts:
 - Developed background jobs for generating seller payout invoices.
 - Legacy Code Refactoring:
 - Refactored and maintained legacy code based on Nop-Commerce.
-
- **Intern** Jun 2020 – Sep 2020
 Mootantroo, Tehran, Iran
 - E-commerce Business Understanding:
 - Learned about the e-commerce business and set up Business Process Management (BPM) and Business Process Model and Notation (BPMN) for all teams, documenting their workflows.
 - learn HTML and CSS, JavaScript
 - Gained knowledge in C#, .Net framework, SQL, MVC, and Design patterns (Factory Method, Abstract Factory, Chain of Responsibilities, Decorator, Facade, Singleton, Mediator).
 - Learned Nop-Commerce platform for e-commerce solutions.

PROJECTS

- **Pigeon**

A monolithic, clean architecture .Net dual-purpose project designed to help website owners monitor and manage the status of their web pages and also perform data mining to extract insights from news publisher websites. [GitHub](#)

- **Balancer**

.NET web API application built with the principles of Clean Architecture, which emphasizes separation of concerns, testability, and maintainability to provide a flexible and scalable solution for managing user accounts, transactions, and configurations. [GitHub](#)

- **Sparrow**

An API project implementing the CQRS(MediatR) pattern to decouple command and query databases. [GitHub](#)

- **EpicPic**

Convolutional neural networks to improve image recognition accuracy in face recognition led to the recognition of up to 97.38% of student and staff faces while delivering food.

- **Travel Adviser**

A chatbot for creating a vacation planner recommendation in Persian for travelers using technologies like ChatGPT, Langchain, and Neo4j. [Demo](#) & [GitHub](#)

COURSES AND CERTIFICATES

- **Machine Learning** by Stanford University, Coursera Jul 2022

Grade: 92.65

- **Python for Data Science, AI & Development** by IBM, Coursera Feb 2023

Grade: 94.91

REFERENCES

- **Dr. Amir Jalaly**

Associate Professor, Department of Computer Engineering, University of Qom

Thesis advisor for the undergraduate research project

Teacher of Theory of Languages and Machines and Compiler courses

Director of the Smart Software Lab

Email: jalaly.bi@gmail.com | [Google Scholar](#) | [LinkedIn](#) | [Orcid](#)

- **Amir Lakizadeh**

Assistant Professor, Department of Computer Engineering, University of Qom

Teacher of Data Structure and Algorithm and Information Retrieval courses

Head of the Computer Engineering Department

Email: lakizadeh@qom.ac.ir | [Google Scholar](#) | [LinkedIn](#)

- **Dr. Mohsen Nickray**

Associate Professor, Department of Computer Engineering, University of Qom

Teacher of Computer Networks and Data Transmission courses

Email: nickraymohsen@gmail.com | [Google Scholar](#)