

JAVAD RAZI

(+98) 921 316 6138 · javad.raziglou@gmail.com · github.com/jrazi

Education

Sharif University of Technology

2022 - Present

M.Sc. in Computer Engineering - Bioinformatics

Tehran, Iran

- **Thesis:** Exploring Causal Links Between Gut Microbiome and Disease Using Deep Causal Representation Learning
- **Teaching Assistant:** Deep Generative AI Models (Spring 2024), Introduction to Bioinformatics (Fall 2023), Machine Learning System Design (MLOps) (Spring 2023)

University of Tehran

2015 - 2021

B.Sc. in Computer Software Engineering

Tehran, Iran

- **Thesis:** Mobile Application for Monitoring INR Levels in Warfarin Patients
- **Teaching Assistant:** Advanced Programming (Fall 2017), Data Structure and Algorithms (Fall 2018, Fall 2019)

Technical Skills

- **Backend Development:** Java, Kotlin, Spring Framework, Hibernate, Micrometer, Python, FastAPI, Pydantic, Golang, GORM
- **Data / Event Storage & Streaming:** SQL, PostgreSQL, MongoDB, Apache Cassandra, Redis, Apache Kafka, ELK Stack
- **API & Messaging:** RESTful APIs, gRPC, Protobuf, WebSocket
- **DevOps & Monitoring:** Git, CI/CD (Jenkins, GitHub Actions, ArgoCD), Kubernetes, Docker, Basic Bash Scripting

Work Experience

Snapp

August 2024 - September 2024

Software Engineer - Snapp Box Venture

Tehran, Iran

- Contributed to the development and maintenance of multiple services within Snapp Box's microservices architecture.
- Participated in the design and implementation of multiple backend components using Java and Spring.
- Collaborated with cross-functional teams to integrate new services into the existing architecture, aligning with the company's scaled agile framework.
- Supported ongoing codebase improvements aimed at enhancing performance and maintainability, working within a structured agile environment.

Holoo — IoT Smart Home System

Summer 2023

Back-end Developer

Tehran, Iran

- Contributed to the development of an IoT ecosystem, including a cloud server (HomeX) and an edge device (Holoo Hub) using Java with Quarkus and Python with FastAPI.
- Utilized reactive programming and MongoDB to build a scalable system for processing real-time data.
- Promoted an API-first approach to facilitate independent development and aligned the project with agile methodologies.
- Managed CI/CD pipelines and established MongoDB replica sets, improving system reliability and deployment efficiency.

Estinext — IoT Smart Home System

Fall 2020 - Summer 2022

Full Stack Developer

Tehran, Iran

- Developed core components of an IoT management system using Java and Spring Boot, with a focus on real-time data processing and concurrent device connections.
- Established a WebSocket-based communication infrastructure, optimized with Redis as a cache and MongoDB for persistent storage.
- Implemented automated testing and logging to enhance maintainability and observability of the software.
- Formulated MongoDB aggregation pipelines to analyze device usage patterns and system performance.
- Developed an Admin Dashboard with React.js, providing system administrators with essential tools for monitoring and management.

Intelligent Systems and Robotics Lab, University of Tehran

Summer 2019 - Spring 2020

Full Stack Developer

Tehran, Iran

- Collaborated on an Early Warning System for earthquake detection with the Iranian Seismological Center.
- Built a back-end service using Java/Spring Boot for collecting and storing motion sensor data, using InfluxDB for time-series data and PostgreSQL for other relevant information.
- Designed a web application with React.js for monitoring sensor data, including dynamic heat maps for visualizing data in real-time.

Selected Projects

MyINR: Mobile Application for INR Management in Patients on Warfarin **2020 - 2021**

Bachelor's Thesis Project

- Developed a mobile application for INR monitoring in patients on Warfarin, enabling electronic communication of test results with physicians.
- Built the backend with Node.js and Express.js, utilizing Sequelize ORM for database interactions.
- Created the mobile application with React Native for cross-platform functionality and implemented secure authentication using JWT.

Repo2File4GPT: Expanding LLMs Knowledge through Public Codebases **Spring 2023**

Personal Project

- Developed a tool that converts GitHub repositories into a structured format readable by AI models, enhancing the accessibility of technical content.
- Organized data into an indexed markdown format to facilitate seamless integration and context retention by AI models.

KnockoffOrigins **Spring 2024**

Academic Project

- Implemented a Python version of the "Controlling the False Discovery Rate via Knockoffs" paper, focusing on variable selection in high-dimensional data.
- Integrated knockoff features with Lasso regression for feature importance assessment and created data generators for evaluation.

Persian Database of Movies **Winter 2024**

Personal Project

- Developed a web crawler with Scrapy to compile a structured dataset of approximately 15,000 movie entries from a Persian movie website.
- Implemented scripts for URL extraction and data retrieval, ensuring thorough data collection.

Achievements & Awards

- Ranked in the top 20 nationally in the 2022 M.Sc entrance exam across multiple fields: Networks and Security (11th), Software Engineering and Data Science (13th), and Artificial Intelligence (17th).
- Winning idea in the "Kenar Divar" hackathon, held at Sharif University of Technology in June 2024. Contributed to the development of "Moaveze Bazaar," a prototype marketplace add-on for Divar. GitHub Repository

Interests and Activities

Grand Strategy & RPG Games, Board Games, Social Hangouts, Roundtable & Discussion Groups, Staying Hydrated