# Mohammad Javad Dehfroz

# Software Engineer | Data Science Systems Programming

### Summary

A results-driven Computer Science and Mathematics student at Amirkabir University, specializing in full-stack web development, data analysis, and low-level systems programming. Proven ability to architect, develop, and deploy robust software solutions through rigorous academic projects and professional freelance experience. Eager to apply advanced problem-solving skills to a challenging software engineering role.

#### **Key Competencies**

- Full-Stack Engineering: Architecting and deploying responsive, scalable web applications using the MERN stack (React.js, Node.js, Express).
- Systems Programming: Utilizing C/C++ for OS-level development, including kernel modification, process scheduling, and concurrency management.
- Data Analysis & Machine Learning: Applying Python (Pandas, Scikit-learn) and R to manipulate data, derive
  insights, and build predictive models.

#### Technical Skills

Proficient Languages: Python, C/C++, JavaScript (ES6+), Java | Web Stack: React.js, Node.js, HTML5/CSS3

| Data Stack: Pandas, NumPy, Scikit-learn

Familiar Languages: R, Assembly | DevOps & Tools: Git, Docker, GitHub, Shell Scripting | Databases:

SQL (PostgreSQL), NoSQL (MongoDB)

#### **Projects**

2024 Quran-Plus: Desktop Utility

A desktop utility for quick search and access to Quranic verses and multiple translations.

GitHub: github.com/MohammadJavadQm/Quran-Plus

2024 xv6 OS Fork: Kernel Mod

Implementing deep modifications to the xv6 kernel to experiment with scheduling, processes, and file system concepts.

GitHub: github.com/MohammadJavadQm/xv6

2023 Code HM6: Low-Level Arch

A project related to the Computer Architecture and Assembly course, including low-level hard-ware/software implementations.

GitHub: github.com/MohammadJavadQm/codehm6

2023 **OS-HW3: IPC & Sync** 

A set of exercises and projects related to the Operating Systems course, focusing on synchronization and Inter-Process Communication (IPC).

GitHub: github.com/MohammadJavadQm/OS-HW3

## Professional Experience

#### 2023-Present Freelance Web Developer, Remote

- O Spearheaded the development of end-to-end web solutions for freelance clients, managing the entire project lifecycle from ideation to deployment.
- Engineered performant, responsive user interfaces with React.js, measurably improving user engagement and accessibility.
- Built and maintained scalable, stateless back-end services and RESTful APIs using Node.js, ensuring high availability and reliability.

#### Education

2022-Present B.Sc. in Mathematics & Computer Science, Amirkabir University of Technology, Tehran, Iran

#### Additional Information

Languages Persian (Native), English (Professional Working Proficiency)

Achievements Awarded 4th Dan Black Belt in Karate, demonstrating exceptional discipline and long-term commitment.