MAGDY YOUAKIM

Fairfield, IA 52557 • +1-213-492-0779 • https://www.linkedin.com/in/magdy-y-49b22119a/

JAVA SOFTWARE ENGINEER

Skilled Software Engineer with 2 years of experience in Java, Spring Framework, JavaScript, and React. Proficient in developing scalable, high-performance applications and familiar with Agile methodologies. Hands-on experience in building modular architecture, RESTful APIs, and MySQL databases. Strong background in Java development with expertise in Microservices. Solved over 500 LeetCode problems, demonstrating strong problem-solving and algorithm skills. Passionate about Software Design, Architecture, and microservices, with a deep love for Cloud-based solutions.

CORE COMPETENCIES

• Creative Problem Solving • Critical Thinking • Agile Methodologies • Microservices Architecture • Test-Driven Development (TDD) •Java Enterprise Development • Communication Protocols • Memory Management • Object-Oriented Programming (OOP) • Web Services Development • Embedded C Programming • Microcontroller Programming • Interrupt Handling

Languages: Java, C, JavaScript, Python.
Web: JSP, Servlet, HTML, CSS, AJAX, jQuery, React, Open Source.
Web Services: REST, SOAP, GraphQL.
Application & Web Servers: Apache, Tomcat.
Frameworks: Spring (Spring MVC, Spring Data, Spring Boot, *Spring Cloud*), Hibernate, Node.
Databases: MS SQL, MySQL, PostgreSQL, MongoDB, NoSQL.
Version Control Systems: Git and GitHub.
Cloud Platforms: AWS.
Containerization: Docker, Kubernetes.
Tools & IDEs: Eclipse, IntelliJ, PyCharm, Visual Studio, Code::Blocks, Vim, Emacs, Makefile, CMake, Bash Scripting
Soft Skills: Strong leadership, ownership and effective problem-solving, technical support.

PROFESSINOAL EXPERIENCE

CAREER NOTE: *Completed on-campus studies and currently taking distance education courses to complete a* ***master's degree in computer science*** *(Available for full-time, W-2 employment).*

EFG-Holding, Cairo, Egypt **Engineer II** **Nov 2021 – Mar 2024**
Java Software Engineer

- Designed and developed a microservices architecture for managing SMS transmission.
- Implemented a robust SMS sending service utilizing priority-based dispatching and a round-robin technique to optimize message delivery.
- Built a comprehensive administration panel to facilitate real-time monitoring and management of the SMS gateway.
- Developed a provider health-check system along with a retrial mechanism to ensure reliable message delivery in case of failures.

Technologies Used *Java 8, Spring Boot, Spring Data JPA, Hibernate, PostgreSQL, Spring Cloud, Spring Security, Git, Maven, JUnit, Mockito, JSON, XML, Postman, Docker, Swagger, Apache Tomcat*

Part-time Freelancing. **Sept 2019– Aug 2021**
Web and Embedded Software Engineer

- Developed comprehensive course materials for Embedded Systems, including lectures, hands-on exercises, and assessments, to effectively teach core Computer Science concepts.
- Delivered four rounds (each lasting two months) of a Data Structures and Algorithms (DSA) course, covering all fundamental concepts and problem-solving techniques.

Technologies Used: *Java, Spring Boot, Embedded C, Linux Operating Systems.*

INTERNSHIP EXPERIENCE

Valeo, Smart Village, Egypt **Oct 2021 – Nov 2021**

A French automotive supplier that designs and manufactures products for automakers and the aftermarket.

Embedded Software Trainee.

- Designed and implemented software components for hardware interfacing using C programming.
- Conducted unit and integration testing to validate software reliability and ensure adherence to safety standards.

Technologies Used: *C, OSEK OS (Real-Time Operating System for Embedded Systems).*

NTI (National Telecommunication Institute), New Capital, Egypt **Jun 2021 – Sept 2021**

NTI is Egypt's premier ICT education, research, and technical consultation institution.

Web Software Development Trainee

- Developed firmware for STM32 microcontroller to interface with GPS and SIM modules, ensuring accurate car location data transmission to a remote server.
- Built a PHP-based admin panel for real-time vehicle tracking, data management, and reporting, improving fleet monitoring efficiency by 40%.
- Integrated hardware components (GPS, SIM, STM32) with server communication protocols to achieve reliable data acquisition and processing.

Technologies Used: *C (Embedded C, ANSI C), FreeRTOS, Keil µVision, GCC Compiler, Unity (Unit Testing Framework), I²C (Inter-Integrated Circuit), SPI (Serial Peripheral Interface).*

ACADEMIC PROJECTS

Maharshi International University (2024)

- **Dynamic Music Player Website:** This project involved creating a feature-rich music player website designed for an intuitive and enjoyable user experience. My role included developing the backend using Node.js. The platform offers essential music controls such as play, pause, shuffle, and reverse, ensuring seamless functionality for users. The combination of these technologies enabled a responsive and dynamic music player accessible across various devices. Utilized Node.js, React, TypeScript.

- **Online Shop Platform:** This project focused on building an engaging online shopping website that simplifies user interaction and enhances the shopping experience. I contributed by developing the backend with Spring Boot, supported by a MySQL database for efficient data management. The platform features user-friendly navigation, robust product browsing, cart management, and transaction functionality. This integration of technologies ensured a scalable and efficient e-commerce solution. Utilized Spring Boot, React, MySQL.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 12/2026)

Maharishi International University, Fairfield, Iowa

Key Courses: Software Engineering, Web Programming, Web Application Architecture, Enterprise Architecture, Algorithms, AWS Cloud Computing.

Bachelor of Science in Communications and Electronics

Minia University, Minia, Egypt (08/2021)