Abdelrahman Tarek

 $\begin{tabular}{ll} \lozenge Giza/6October & \boxtimes Abdulrahmantarek0.1@gmail.com & $+201116909615$ \\ \end{tabular}$

Professional Summary

Results-driven Software Engineer with experience building robust, scalable backend systems and modern web applications. Skilled in frameworks such as Spring Boot, NestJS, and React, with deep knowledge of RESTful API development and database technologies including PostgreSQL, MySQL, and MongoDB. Demonstrates strong coding practices, problem-solving skills, and a commitment to clean architecture and maintainable code. Experienced in Agile development environments, containerization with Docker, and collaborating with cross-functional teams to deliver high-quality software solutions.

Education

Cairo University

Sept 2020 - Jul 2024

BS in Computer Science

- o GPA: 3.01/4.0
 - Coursework: OOP, Discrete Mathematics, Software Engineering, Operating Systems, Web, Data Structures, Algorithms, Database, Computer Networks

Experience

Software Engineer

Feb 2025 - May 2025

MasteryHub

- Contributed to the development of cross-platform features using Flutter for mobile and React for web-based admin tools.
- Built and maintained scalable backend services using both NestJS and Spring Boot, applying modular architecture and clean coding principles.
- Designed RESTful APIs with authentication and role-based access control, supporting efficient and secure user operations.
- Worked with PostgreSQL, MySQL, and MongoDB to handle structured and unstructured data, ensuring optimized queries and data consistency.
- Created containerized development and deployment pipelines using Docker and 'docker-compose' for consistency across environments.
- Participated in Agile sprints, collaborated closely with cross-functional teams, and tracked deliverables through Jira to meet sprint goals.
- o Tools Used: Flutter, React, NestJS, Spring Boot, PostgreSQL, MySQL, MongoDB, Docker, Git, Jira

Software Engineer Intern

Aug 2024 - Oct 2024

Orange

- Worked with SQL databases (MySQL) and NoSQL databases (MongoDB), focusing on efficient querying, data modeling, and optimization.
- Developed and maintained Java Spring Boot applications, implementing core design patterns for clean, scalable code.
- Participated in testing processes, including unit, integration, and system testing, ensuring high code quality and reliability and gained hands-on experience in secure coding practices.
- Collaborated with cross-functional teams to develop and deploy software solutions.

Projects

WEBSERVICE APPLICATION

 Built a RESTful web service using Java Spring Boot to handle mobile recharge, internet services, and money transfers with secure authentication and role-based access.

- Designed scalable architecture with layered components, applied MVC and Singleton design patterns, and ensured code modularity and testability.
- o Integrated database operations with MySQL, implemented validation, logging, and exception handling.
- Ensured security through input validation and basic authentication mechanisms; conducted testing using Postman and JUnit.
- o Tools Used: Java, Spring Boot, MySQL, Postman, JUnit, Git, REST APIs

NEWS APP

- Built a full-stack news app backend with Node.js and MongoDB and a responsive Flutter frontend, supporting user registration, login, article parsing, and text-to-speech features.
- Added personalized news suggestions based on user search history and enabled saving, liking, and commenting on articles.
- Integrated a Python-based machine learning model to automatically detect and flag offensive comments in real-time.
- Applied REST API design, followed MVC structure, and containerized the app using Docker for easier deployment.
- o Tools Used: Node.js, Express.js, MongoDB, Flutter, Python, Docker, REST APIs, Git

Task Management App

- Developed a task management app using Spring Boot for the backend and React for the frontend, enabling users to create, update, and track tasks with authentication and role-based access control.
- Integrated MongoDB for efficient data storage and used Docker to containerize the application, enabling easy deployment and environment consistency.
- Built RESTful APIs and managed frontend state with React Context. Designed a responsive UI using Material UI.
- o Tools Used: Spring Boot, React, MongoDB, Docker, REST APIs, Material UI, Git

Skills

- Programming Languages: Java, C++, JavaScript, Python, C, C#, TypeScript
- o Frameworks & Libraries: Java Spring Boot, Django REST Framework, React, Node.js, NestJS
- o Tools & Technologies: Git, Docker, Linux, JUnit, Jira (Agile/Scrum), Postman
- o Databases: SQL (PostgreSQL, MySQL, MS SQL Server), NoSQL (MongoDB)

Achievements

- Ranked 8th in the 2023 ECPC Qualifications Collegiate Programming Contest and qualified for ECPC Finalist.
- Participated in 2023 ECPC (Egyptian Collegiate Programming Contest) Finalist.
- Ranked 29th in the 2022 ECPC Qualifications Collegiate Programming Contest.