# **AHMED ALAA**

# SOFTWARE ENGINEER

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## **PROFESSIONAL SUMMARY**

Results-driven Software Engineer with 8 years extensive experience in designing and developing scalable, secure, and high-performance web applications. Skilled in microservices architecture, backend development, and database optimization, with a proven track record of enhancing system efficiency, refactoring legacy applications, and delivering production-ready solutions. Adept at writing clean, maintainable, and testable code, and experienced across multiple technologies including PHP, Node.js, Python, and modern frameworks.

## **CORE SKILLS**

- Backend: PHP (Laravel, Livewire), Node.js (Express.js, Adonis.js, Nest.js), Python (Django, Flask).
- Frontend: Vue.js, HTML5, CSS3, JavaScript, Bootstrap, Tailwind, Alpine.js, jQuery, AJAX, Axios.
- Databases: MySQL, PostgreSQL, SQLite, MongoDB, Redis.
- DevOps & Tools: Docker, Git, GitHub, Bitbucket, Linux, MacOS.
- Other: TDD, Agile/Scrum, REST APIs, Microservices, ERD Design, Refactoring Legacy Systems

## PROFESSIONAL EXPERIENCE

#### Backend Team Lead & Software Engineer | Art Sketch

Dec 2023 - Present

- Led backend development teams within a fast-paced software house environment, delivering solutions across diverse domains such as enterprise systems, SaaS platforms, HRTech, and compliance-focused applications.
- Worked with multiple programming languages and frameworks, adapting to client requirements and project architectures while ensuring scalable, maintainable, and secure backend solutions.
- Guided team members through code reviews, system design decisions, and best practices in API development, database structuring, and software lifecycle management.
- Collaborated with cross-functional teams to architect backend infrastructures that aligned with high-level business and technical goals.

## Software Engineer | Waseet.net

Dec 2020 - Sep 2023

- Engineered a microservices-based classified ads platform with containerized services (Docker), ensuring scalability and streamlined deployment.
- Developed a custom internal communication package using RabbitMQ, improving service-to-service
  efficiency and system throughput.
- Designed and implemented a microservice gateway with Express.js workers, enabling parallel request handling and boosting overall system performance.
- Enhanced reliability by adopting Test-Driven Development (TDD) with high test coverage, reducing production bugs by 30%.
- Refactored legacy code into scalable, maintainable modules, cutting technical debt and improving long-term code quality.
- Optimized SQL queries and big data handling processes, significantly reducing response times and improving database performance.

- Led backend development for Suiiz App, a large-scale microservices-based classified ads platform, ensuring scalability and reliability.
- Designed and optimized ERD structures, enabling efficient and scalable database performance under high traffic.
- Accelerated testing pipelines by implementing VCR-based mocking, improving integration test speed by 40%.
- Integrated multiple payment gateways and SMS services, delivering secure, seamless, and faulttolerant transactions.
- Published and deployed production-ready mobile apps on Google Play and Apple App Store, meeting performance and quality benchmarks.

## Software Engineer | Cairo House Development (CHD)

- Built the Bedayaat School Management System, delivering a dynamic dashboard and backend APIS with multi-tenant architecture for seamless school operations.
- Developed REST APIs for mobile apps using Laravel + PostgreSQL, enabling efficient and reliable school data management.
- Enhanced ERP systems with Laravel + Vue.js, and contributed to a Django-based ERP by integrating SMS services for real-time communication.
- Contributed to the CEC e-commerce microservices platform, documenting APIs with Swagger and ensuring scalability for high-volume transactions.
- Designed and delivered multiple CMS and e-commerce websites using WordPress and ModX, ensuring performance and maintainability.

### **EDUCATION**

## **B.Sc.** in Engineering

Faculty of Engineering

• Major in Communication & Electronics.

## **Software Engineer Trainee**

Cairo House Development (CHD)

• Major in Software Engineering

## FullStack Diploma

**ROUTE Academy** 

Major in Software Engineering

**CCNA** Certification

• Major in Software Communication Engineering

#### **LANGUAGES**

• Arabic: Mother tongue.

• English: Professional.