

MOHAMED ELHALFAWY

SOFTWARE ENGINEER

SUMMARY

Senior Backend Developer with over 6 years of experience, specializing in Java, Python, and PHP.

My passion lies in building scalable and efficient applications, developing RESTful APIs, and utilizing Python frameworks like Django and FastAPI. I'm skilled in managing complex databases and implementing advanced algorithms to optimize performance.

Leveraging cloud platforms like Amazon Web Services (AWS) and Google Cloud Platform (GCP), I ensure that applications are both scalable and reliable. I'm proficient in Agile methodologies and version control systems like Git, thriving in dynamic environments that prioritize collaboration and continuous improvement.

Committed to writing clean, maintainable code, I constantly seek opportunities to refine my skills and embrace new technologies. Let's connect to explore how we can drive innovation and achieve success together.

WORK EXPERIENCE

Senior Full Stack Software Engineer

2023-07 - Present

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- Led the development and implementation of full-stack software solutions, enhancing system functionality and user experience.
- Collaborated with cross-functional teams to design and deliver high-quality software products, meeting project deadlines and specifications.
- Utilized expertise in both front-end and back-end technologies to create seamless and efficient applications.
- Implemented best practices in software development, ensuring code quality, scalability, and maintainability.
- Conducted thorough testing and debugging to ensure software reliability and performance.
- Mentored junior developers, providing guidance and support to foster their professional growth.
- Streamlined development processes, reducing project delivery times by 20%.
- Actively participated in strategic planning and decision-making to align software development with business goals.

Senior Software Engineer

2023-10 - 2024-08

Globant

- **Python and Microservices Development:** Leveraged Python to develop high-performance, concurrent server applications using advanced algorithms and data structures to optimize throughput and reduce latency.
- **Python Frameworks:** Utilized Python frameworks such as Django and FastAPI to build robust, scalable microservices architecture, ensuring high performance and reliability.
- **Noonfood Project in Riyadh:**
 - **Individual Contributions:**
 - Developed and optimized critical software components using Python, significantly enhancing system efficiency and reliability.

📍 Alexandria, Egypt

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🔗 github.com/mohamedelhalfawyy

CERTIFICATIONS

Certificate of Algorithmic 2022-08 - 2022-09

Toolbox -
University of
California San
Diego

Coursera

- Essential algorithmic techniques
- Design efficient algorithms
- Practice solving algorithmic interview problems
- Implement efficient and reliable solutions

SQL for Data Science - 2022-09 - 2022-10

University of
California,
Davis

Coursera

- Identify a subset of data needed from a column or set of columns and write a SQL query to limit to those results.
- Use SQL commands to filter, sort, and summarize data.
- Create an analysis table from multiple queries using the UNION operator.
- Manipulate strings, dates, & numeric data using functions to integrate data from different sources into fields with the correct format for analysis.

SKILLS

Programming Languages

- Java

- Implemented advanced data processing algorithms to improve service response times by 40% and reduce resource utilization by 30%.
 - Methodically tested solutions by developing and executing test plans, debugging, and creating testing scripts and tools to ensure quality and performance.
- **Team Contributions:**
- Collaborated with software development and testing teams to create robust solutions that met client requirements for functionality, scalability, and performance.
 - Reviewed project specifications and formulated technology solutions that consistently met or exceeded performance expectations, ensuring project success.
 - Leveraged AWS and GCP to build and maintain scalable cloud infrastructures, ensuring high availability and performance.

Senior Software Engineer

2023-05 - 2024-05

DIB GmbH

- **Java and Microservices Development:** Designed and implemented scalable solutions for complex business requirements using Java and related technologies.
- **Java Frameworks:** Utilized Java frameworks to build robust, scalable microservices architecture, ensuring high performance and reliability.
- **Cloud Integration:** Enhanced cloud-based application performance and scalability by integrating AWS services into the development and deployment processes.
- **Legacy System Redesign:**
 - **Team Contributions:**
 - Directed a team in the redesign of a legacy system, employing modern development practices and architecture patterns, which led to a 50% increase in system performance and maintainability.
- **Distributed Cloud Storage Solution:**
 - **Individual Contributions:**
 - Implemented critical Java components for a distributed cloud storage solution on AWS, optimizing data redundancy and retrieval strategies to achieve 93% data availability.
- **API Gateway Development:**
 - **Individual Contributions:**
 - Engineered a complex Java-based API gateway that facilitated secure, efficient communication between microservices, improving system responsiveness and throughput by over 25%.

Data Engineer

2022-07 - 2023-10

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- **Python and Microservices Development:** Designed and implemented scalable solutions for complex business requirements using Python and related technologies.
- **Python Frameworks:** Utilized Python frameworks such as Django and FastAPI to build robust, scalable microservices architecture, ensuring high performance and reliability.
- **Cloud Integration:** Enhanced cloud-based application performance and scalability by integrating AWS services into the development and deployment processes.
- **Legacy System Redesign:**
 - **Team Contributions:**
 - Directed a team in the redesign of a legacy system, employing modern development practices and architecture patterns, which led to a 50% increase in system performance and maintainability.
- **Distributed Cloud Storage Solution:**
 - **Individual Contributions:**
 - Implemented critical Python components for a distributed cloud storage solution on AWS, optimizing data redundancy and retrieval strategies to achieve 93% data availability.
- **API Gateway Development:**

- Python
- JavaScript
- PHP
- C++
- GraphQL
- Dart
- REST
- SQL
- NoSQL

Frameworks

- Spring Boot
- Spring
- Django
- FastAPI
- Flask
- ExpressJS
- Node.js

Databases

- MySQL
- MS SQL Server
- SQL Server
- MongoDB
- Firebase
- Postgre

Other

- AWS
- GCP
- Docker
- Kubernetes
- Cloud Services
- JIRA
- Kafka
- JSON

Version Control Systems

- Git

Code Hosting Services

- GitHub
- Bitbucket
- GitLab

- **Individual Contributions:**

- Engineered a complex Python-based API gateway using FastAPI that facilitated secure, efficient communication between microservices, improving system responsiveness and throughput by over 25%.

Software Engineer (Freelance)

2018-08 - 2023-04

Upwork

- **Java and Web Development:** Designed and implemented several high-traffic web applications using Java and Spring Boot, integrating AWS services to ensure scalability, leading to 100% uptime and handling over 10,000 concurrent users.
- **Full-Stack Web Development:**
 - **Individual Contributions:**
 - Proficient in full-stack web development, utilizing languages such as Python, JavaScript, and PHP. Well-versed in frameworks including Django, Flask, and React, with a focus on building scalable and efficient web applications.
- **Cloud Integration:**
 - **Individual Contributions:**
 - Integrated AWS services to ensure scalability and reliability of web applications, achieving 100% uptime and efficiently managing high traffic loads.

EDUCATION

Bachelor's Of Computer Science (B.CS)

2018 - 2022

Arab Academy For Science Technology, Maritime

Subjects Covered

- | | |
|--------------------------------------|--------------------------------|
| • Data Structures And Algorithms | • Computer System Security |
| • Advanced Programming Applications | • Web Programming |
| • Database Systems | • Systems Programming |
| • Advanced Artificial Intelligence | • Object- Oriented Programming |
| • Cloud Computing | • Computing Algorithms |
| • Structure Of Programming Languages | • Operating Systems |
| • Probability & Statistics | • Introduction To Networks |

GENERIC DEVELOPMENT SKILLS

- | | |
|-------------------|----------------------------|
| • Networking | • Algorithm Design |
| • Problem-Solving | • Operating Systems |
| • Code Reviews | • Agile Methodologies |
| • Virtualization | • Object-oriented Design |
| • Cloud Services | • Continuous Integration |
| • Source Control | • Planning and Estimation |
| • Data Structures | • Open Source Contribution |

LANGUAGES

English

native or bilingual

Arabic

native or bilingual