MOHAMED ELHALFAWY

SOFTWARE ENGINEER

Alexandria, Egypt

+201000965660

mohamed.elhalfawyy@gmail.com

linkedin.com/in/mohamedelhalfawy/

github.com/mohamedelhalfawyy

SUMMARY

Enthusiastic junior backend developer with a proven track record in Python, Java, PHP, Node.js, MongoDB, and AWS. Proficient in designing RESTful APIs, implementing MVC frameworks, and crafting robust database solutions. Adept at leveraging cloud computing technologies to deliver scalable applications. Committed to writing clean, maintainable, and testable code. Skilled in utilizing Git for version control and well-versed in agile methodologies for effective project management. Highly motivated to continuously acquire new skills and further develop as a developer.

WORK EXPERIENCE

Software Engineer — 2023-10 - Present
Cloudberry Solutions

- **Coordinated with fellow engineers** to assess and enhance software and hardware interfaces, fostering efficient collaboration and integration.
- **Reviewed project specifications** and formulated technology solutions that consistently met or exceeded performance expectations, ensuring project success.
- **Collaborated with software development and testing teams** to create robust solutions meeting client requirements for functionality, scalability, and performance.
- **Engineered robust, scalable, modular, and API-centric infrastructures**, setting the foundation for reliable and flexible systems.
- **Methodically tested solutions** by developing and executing test plans, debugging, and testing scripts and tools to ensure quality and performance.

Senior Software Engineer — 2023-05 - Present
DIB GmbH

- **Designed and implemented scalable solutions** for complex business requirements using Python and related technologies.
- **Collaborated with cross-functional teams** to ensure the timely delivery of high-quality software products.
- **Leveraged Python and AWS** to craft a high-performance mobile application for the real estate market, introducing innovative features that set our product apart.
- **Focused on enhancing the end-user experience**, making the application more intuitive, user-friendly, and aligned with the specific needs of real estate professionals.
- **Led software development initiatives** as a subject matter expert and primary point of contact for project management staff, resolving technical issues collaboratively.

Data Engineer — 2022-07 - 2023-10
VlyTix

- **Dramatically improved database performance** by implementing custom indexes, table partitioning, and SQL query optimization, resulting in a remarkable 70% reduction in query execution time and a 50% enhancement in application response time. This enabled faster, more informed decision-making.
- **Designed and constructed an automated data pipeline** to extract, transform, and load data from multiple sources into a centralized data warehouse. This initiative led to a notable increase in data availability and accessibility for business users.
- **Implemented rigorous data quality checks and validation rules**, leading to a substantial reduction in errors and inconsistencies in data reports. This not only improved data accuracy but also bolstered trust in data-driven decision-making.
- **Proficient in managing diverse data sources and platforms**, including Azure and AWS. Utilized Python extensively for data manipulation and analysis, ensuring adaptability to

CERTIFICATIONS

2022-08 - 2022-09

Certificate of Algorithmic Toolbox - University of California San Diego
Coursera

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

2022-09 - 2022-10

SQL for Data Science - 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

- Python
- Java
- JavaScript
- PHP

evolving technology trends and optimizing data strategies accordingly.
- **Conducted comprehensive evaluations of third-party data handling solutions** to assess their compliance with internal requirements and stakeholder needs.
- **Designed compliance frameworks for multi-site data warehousing efforts** to ensure alignment with state and federal data security guidelines.

Software Engineer (Freelance)   2018-08 - 2023-04

Upwork

- **Experienced Software Engineer with 4+ years** of freelance development expertise, delivering high-quality solutions to clients.
- **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.
- **Skilled in client collaboration**, adept at understanding their requirements, designing tailored software solutions, and consistently delivering high-quality products within established deadlines.

EDUCATION

Bachelor's Of Computer Science (B.CS)   2018 - 2022

Arab Academy For Science Technology, Maritime

Subjects Covered

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

GENERIC DEVELOPMENT SKILLS

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

LANGUAGES

English

native or bilingual

Arabic

native or bilingual

- GraphQL
- Dart
- REST
- SQL
- NoSQL

Frameworks

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

Databases

- MYSQL
- SQL Server
- Firebase
- MS SQL Server
- MongoDB
- JDBC

Other

- AWS
- Docker
- Postman
- Cloud Services
- JIRA
- Office 365
- Kafka
- JSON

Version Control Systems

- Git

Code Hosting Services

- GitHub
- GitLab
- Bitbucket