MOHAMED ASHOUR

Senior Software Engineer

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PROFESSIONAL SUMMARY

Senior Software Engineer with **7+ years of experience** in **real-time data processing**, **machine learning**, and **cloud technologies** and leading lean Software Engineering teams. Proven expertise in **building scalable systems**, optimizing costs, and leading cross-functional teams to deliver impactful solutions. Proficient in **Python**, **Golang**, and **AWS**, with a strong foundation in **data structures**, **algorithms**, and **DevOps** practices. Seeking to leverage my skills to drive innovation and efficiency in software development.

PROFESSIONAL EXPERIENCE

Software Engineer

Spire Global | Jan 2022 – Present

- Designed and implemented **real-time data processing systems** for GNSS-R/RO satellite data, meeting strict latency requirements for clients like NASA, NOAA, and EUMETSAT for multi-million USD contracts.
- Led an **ML-based sea ice detection project**, collaborating with scientists from concept to **production deployment**.
- Reduced AWS costs by **$250K annually** through strategic cost optimization initiatives.
- Built and maintained **CI/CD pipelines** (Jenkins) and **Infrastructure as Code** (Terraform) for scalable and reliable deployments.
- **Technologies:** Python, Go, AWS, Docker, Postgres, Terraform, DynamoDB, Jenkins

Software Engineer

Yaoota | Oct 2020 – Dec 2021

- Maintained and enhanced **data pipelines** for web scraping, feature extraction, and data analysis.
- Developed **ML solutions** to improve data utilization, enabling users to access comprehensive product information and history.
- Key projects:
- **Kipp:** Main scraper for collecting product data across the internet.
- **Case:** Internal NLP library for data processing.
- **Technologies:** Python, NLP, Redis, Docker

Software Specialized Officer

Egypt Air Forces | Oct 2018 – Oct 2020

- Developed and maintained software systems for various departments using **C#** and **Oracle databases**.
- **Technologies:** C#, Oracle Database

Software Engineer

Elements Financial Technologies | Aug 2017 – Mar 2018 - Developed a **Payment Gateway as a Service** to provide online payment solutions for businesses of all sizes. - **Technologies:** Node.js, MongoDB, Docker, AWS

Freelance Python Developer

Self-Employed | Jan 2017 – Mar 2020

- Created **data scraping scripts** and **machine learning models** for various clients.
- **Technologies:** Python, Selenium, Scikit-learn

Intern Software Engineer

Codescalers - Egypt | Jul 2016 – Sep 2016

- Built internal dashboards for monitoring cloud servers.
- **Technologies:** Python, Flask

EDUCATION

B.Sc. in Computer & Systems Engineering
Mansoura University, Egypt | 2012 – 2017

SKILLS

- **Programming Languages:** Python, Go, JavaScript, SQL
- **Core Competencies:** Cloud Technologies,Containers, Machine learning, Data Intensive applications, Neural Networks, OOP, Algorithms & Data Structures, APIs, Test-Driven Development, Microservices
- **Tools & Technologies:** AWS, Terraform, Postgres, Jenkins, Github Actions, DynamoDB , MongoDB, Git, Docker, Numpy, Matplotlib, Scrapy, Redis, NLTK, Scikit-learn,

ADDITIONAL INFORMATION

- **Blog:** Sharing insights on software engineering and machine learning at blog.m-ashour.space
- **YouTube:** Sharing educational content at YouTube Channel
- **Interests:** Continuous learning, contributing to open-source projects, community mentorship