MOHAMED ASHOUR

Senior Software Engineer

Email: m.aly.ashour@gmail.com • Blog: <u>blog.m-ashour.space</u> • Location: Luxembourg, Luxembourg

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 <u>blog.m-ashour.space</u>
- YouTube: Sharing educational content at YouTube Channel
- Interests: Continuous learning, contributing to open-source projects, community mentorship