# Mohamed Sweelam

## PROFILE SUMMARY

Dynamic Software Engineer with over a decade of comprehensive experience in designing, developing, and optimizing distributed systems, with a focus on cloud-native and microservices architectures across diverse industries, including telecom, microfinance, hotel management, and customer engagement. A proven leader adept at guiding cross-functional teams to exceed business objectives.

# WORK HISTORY

## Staff Software Engineer | Tamara - UAE

04/2023 - Present

- Tamara is the leading fintech platform to shop, pay and bank in Saudi Arabia and the wider GCC region
- Core member in Compliance vertical who consistently ensured that objectives were met across the business vertical, in line with company-wide goals.
- Led engineering improvements and ensured adherence to industry best practices and modern technologies.
- Initiated and led the adoption of AI within the engineering organization by designing, developing, and deploying an LLM-based automation tool.
- Coach and Mentor for Junior and Senior Engineers, who helped them to move forward in career progression

## Software Architect Consultant | Dyna Systems

06/2024 - 03/2025

- Dyna Systems is a leading technology firm specializing in Microsoft Dynamics 365 Finance and Operations solutions.
- Spearheaded the end-to-end architectural design for a high-performance payment system, ensuring scalability and compliance with industry standards.
- Recommended best practices in software architecture
- Led strategic decision-making, aligning the architecture with business goals and optimizing system performance to handle high transaction volumes.

## **Technical Lead** | Almosafer - UAE

03/2023 - 03/2024

- Almosafer is the Middle East's leading travel brand offering consumers seamless user experiences for travel bookings through its omni-channel offerings across state-of-the-art online platforms.
- Lead the team and provide proper support and coaching.
- Led the design and implementation of cloud-native architectures, optimizing response time by 30%
- Designed solutions, and ensured adherence to best practices and the latest technology stack.
- Support team members and helped in career growth.

## Senior Software Engineer | Unifonic - UAE

03/2021 - 03/2023

- Unifonic is a cloud communications platform that enables organizations to streamline conversations across various communication channels including but not limited to SMS, WhatsApp, Voice Calls, and many more.
- Senior and Staff software engineer who built cloud-native systems, and worked closely with software architects.
- Ensured compliance with industry best practices, reducing system vulnerabilities by 46%.
- Designed solutions, and developed E2E modules.

# Senior Full Stack Developer | Etisalat - UAE

07/2018 - 02/2021

- Etisalat is the largest telecommunication corporation in the GCC. Headquartered in Abu Dhabi UAE, Etisalat serves 11.6 million customers and over 300,000 small, medium and large enterprises and government customers in the UAE.
- Worked in the telecom industry, mainly with core sales applications, worked closely with customers and business analysts to gather requirements
- Designed scalable solutions and Implemented them.
- Made Automation in-place by implementing the CI pipelines for the microservices systems.

## Software Engineer | egabi - Egypt

06/2015 - 06/2018

• Worked in the microfinance industry, built loan management systems, handled support and technical issues reported from the customer side, and applied data migration and integration with third-party tools.

Helwan University

B.S. Computer Science

June 2015

GPA: Good

- Courses: Data Structures & Algorithms, Object Oriented, Database Design, and Data Science
- Graduation Project: Data Visualization framework for Data Analysis using C++ and JS
- Awards:
  - 1st Place MIE Contest (Egypt Best Graduation Project)
  - 1st Place Ibtecar Contest @TIEC (Egypt Best Graduation Project)

## SKILLS

# Practical Skills | The following skills are my hands-on experience

• Languages

Frameworks

• Databases

• Caching Systems

• Messaging Systems

 $\bullet$  DevOps

• Languages Spoken

Java, Kotlin, Go, and LATEX

Spring Boot, Spring Cloud, Gin, and Echo

PostgreSQL, MySQL, MongoDB, Cassandra

Redis, Memcached

Kafka, SQS, RabbitMQ

Docker, Kubernetes, helm, CI/CD tools

Arabic (Mother Tongue), English (Professional)

## PROJECTS

# The following projects are some of the core projects I had worked with, not all!

Murabaha (Tawarroq) | Java (Spring Boot), RabbitMQ, MySQL, Redis, and GCP

10/2020 – Present

- An Islamic financing product that enables companies to offer Sharia-compliant loans through a structured workflow. As a newly launched product, Murabaha contributed to increasing overall company revenue.
- Led the entire project lifecycle from requirements gathering and RFC documentation to solution architecture and successful delivery.
- Designed the system architecture and selected the technology stack to meet scalability and reliability goals.
- Implemented, tested, and deployed the system, ensuring high performance, fault tolerance, and scalability.
- Defined New Relic dashboards and alerting mechanisms to monitor system health and performance effectively.

#### ID Verification (IDV) | Java 17 (Spring Boot), RabbitMQ, MySQL, Redis, and GCP

07/2024 - Present

- A system that functions like an IAM service, operates in different countries, and identifies user identities by collecting their PII from government providers.
- Enhanced system workflow by spotting out the bottlenecks, designed and communicated the improvement and led the activity to delivery
- Supported the team, and secured following the best practices via code paring and review
- Achievements:
  - Pointed the legacy gaps, and bottlenecks in the system, re-factored the code and fix business workflow issues.
  - Proactively embraced AI advancements by designing and deploying an LLM-based tool that significantly reduced manual operational workload through automation.
  - Designed and delivered a Kibana business dashboard that provided stakeholders with clear visibility into system performance and progression, driving faster and more informed decision-making.
  - Enhanced the observability stack using Grafana & NewRelic

## Hotel Mapping System (HMS) | Java (Spring Boot), Kafka, AWS, MySQL, Mongo

03/2023 - 06/2024

- Integrating with multiple hotels' contents suppliers, apply the right mapping of hotels and rooms.
- Leading the development of the system following Microservices arch
- Gathering requirements, Code Reviewer and Mentor
- Design and solutionizing system features
- Achievement: I was able to achieve 99% stability for two main components and increase the system's throughput from 10 RPS to 2,500 RPS.

# Room Mapping System (RMS) | Nodejs, Kafka, AWS, MySQL, MongoDB

- 03/2023 06/2024
- Intelligent room-mapping system that formulates and identifies the correct room name among all providers' room names.
- Leading the development of the system following Microservices arch
- Gathering requirements, Code reviewer and Mentor
- Design and solutionizing system features

## NextGen Architecture Migration | Distributed Systems, Microservices, Security Mitigation

01/2022 - 09/2022

- Dedicated to reviewing the new company goal to upgrade the cloud architecture
- working closely with architects and supporting them in understanding existing systems, bottlenecks, and recommended compatible solutions
- Analysis for legacy systems, find bottlenecks, and recommend solutions.
- Review solution architecture and provide feedback on gaps from a tech and business point of view.

# Exposure Layer (EL) | Spring Boot (java-15), RabbitMQ, Kafka, Memcached, Cassandra, MySQL 03/2021 - 02/2023

- EL is acting as API gateway layer for sending SMS, preparing requests and apply required routings, message orchestrations, handle charging and others.
- Designed & implemented a highly scalable systems that follows cloud-native arch
- Team mentor and Production support owner
- Achievement: Successfully upgraded the legacy system to the latest technology stack, enhancing system performance by 8x. Achieved this by identifying bottlenecks in infrastructure solutions and implementing compatible enhancements.

#### Fraud Detection System | Java, Cassandra, AWS EKS, Kafka, ML

05/2022 - 08/2022

- Achievement: Pioneered a new fraud detection algorithm that identified and mitigated 75% of potential against flood and SMS phishing (also known as *smishing*) attacks within the first month
- Review and enhance the algorithm model
- Data layer design and implementation
- End-to-End building for CI pipelines.

Unified Sales Portal | Spring Boot (java-11), Angular-6, Kafka, Oracle DB, Docker Swarm

08/2018 - 01/2021

- Unification for two big telecom sales applications which are managing the core sales business needs (indoor and outdoor) for customers; System allows users requesting new account, managing existing one, moving among telecom componies in UAE.
- Senior Engineer acting as team mentor
- Delivered and Implement End-to-End business features

#### Micro-finance | Java-8, Angular-2, Oracle DB, Docker Swarm

07/2015 - 05/2018

- Fast-growing, high-street lender operating on a local level to provide comprehensive microfinance solutions to lower-income business owners across Egypt.
- Software Engineer who was coding features
- Customer support (on-site)

#### Certificates

• Project Management Diploma	Almosafer Learning Partner-2023

• AWS solution architect Udemy-2021

• Algorithms on Graphs

US San Diego University-2020

• Spring Developer Track Linkedin Learning-2019

• Machine Learning Stanford University-2013

## YOUTUBE CONTENT CREATOR

• Software Arch Talks Podcast

Software Arch Talks Podcast

• Microservices Architecture <u>Microservices Architecture In Arabic</u>

• API Design and Management - Arabic

• Distributed Systems in Actions - Arabic