

MOHAMED SHERIF

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JAVA DEVELOPER

Java back-end developer with 4+ years of experience delivering scalable microservices and high-performance enterprise systems across healthcare and fintech domains. Proven expertise in Spring Boot, AWS, Docker, and secure API development, with a strong track record in database optimization, multi-threaded processing, and CI/CD automation. Delivers resilient, well-architected solutions through Agile collaboration and data-driven engineering.

- Database Management • Software Engineering Principles • Continuous Integration/Continuous Delivery (CI/CD)
- Test-Driven Development (TDD) • Performance Optimization and Scalability • Security and Data Integrity
- Cloud-based Infrastructure and Deployment • Event-Driven Architecture

Languages: Java

Web Services: REST, SOAP, Apache Kafka, RabbitMQ

Web/App Servers: Tomcat

Frameworks: Spring (Core, MVC, REST, AOP, Data, Boot, Security, AI), OAuth2, JWT, Keycloak, Junit, JPA, Hibernate

Databases: Microsoft SQL Server, PostgreSQL, MySQL, Redis

Design Patterns: Singleton, Factory, Builder, Proxy, Adaptor, Template Method

SDLC: Agile, Test-Driven Development (TDD)

Tools: Maven, Git, Postman, JMeter, Docker, GitLab CI/CD, Grafana, Prometheus, ELK Stack (Elasticsearch, Logstash, Kibana), OpenTelemetry, Micrometer

Platforms: Windows, Linux, AWS (EC2, Lambda, S3, RDS, API Gateway, CloudWatch)

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

PROFESSIONAL EXPERIENCE

SANTECHTURE, Cairo, Egypt • 04/2023 – 01/2025

A healthcare technology innovator delivering AI- and cloud-based SaaS solutions to optimize Revenue Cycle Management across the Middle East, North Africa, and Asia.

Mid-Senior Backend Developer

- Developed the QUBE Patient Information System using Spring Boot, Spring Data JPA, and Spring Security, delivering secure RESTful APIs with JWT/OAuth2 authentication to support 650+ healthcare providers.
- Reduced average API response time by 52% (850 ms to 410 ms) and improved 95th percentile latency by 48% through Spring Boot and Redis caching; achieved 65% faster data retrieval with SQL optimization and indexing.
- Streamlined deployment frequency from bi-weekly to daily releases and reduced deployment time by 73% using Docker, GitLab CI/CD, and Maven.
- Increased concurrent user capacity by 180% (2,000 to 5,600 users) through microservices architecture, multi-threaded processing, and auto-scaling.
- Lowered AWS infrastructure costs by 35% and improved application uptime to 99.87% through EC2 optimization and automated scaling strategies.
- Built and integrated Spring AI module with OpenAI models to automate clinical workflows and support provider decision-making through high-throughput, multi-threaded Java applications.
- Implemented event-driven architecture with Apache Kafka for real-time data streaming between ROBIN remittance services and QUBE, developing high-volume XML processing microservices on AWS EC2 and Lambda.
- Collaborated with DevOps to implement Keycloak SSO for ROBIN, authored a configuration guide, and conducted code reviews to mentor junior developers and improve code quality.

Technologies Used: Java, Spring Boot, Spring Data, Spring Security, Spring Mailer, Spring AOP, Spring AI, Apache Kafka, Microsoft SQL Server, JAXB, JPA, JWT, Keycloak, RESTful Services, GitLab, Hibernate, Maven, Git, Postman, Junit, Jira, IntelliJ IDEA, AWS EC2, AWS RDS, AWS S3.

OCCASION, Riyadh, Saudi Arabia (Remote) • 01/2021 – 03/2023

An entertainment provider that facilitates all the needs for your parties and special occasions to be delivered to you wherever you are. Occasion is a platform linking the buyer with events and party providers (Individuals & Shops).

Backend Developer

- Enabled Occasion platform growth from 2,500 to 12,000 active event organizers by developing scalable Spring Framework microservices with Spring Boot and optimizing RESTful APIs.
- Improved database query response times by 73% through SQL optimization, indexing, and database schema design across MySQL, PostgreSQL, and SQL Server.
- Developed secure Java 11 backend services with Spring MVC for request handling, Spring Security, JWT/OAuth2 authentication, and Spring Data JPA for MySQL integration, ensuring reliable and high-performing API access.
- Implemented core backend design patterns (Singleton, Factory, Builder, Proxy) and code review practices to improve maintainability and reduce development time.
- Integrated Apache Kafka for real-time event streaming and asynchronous communication, enhancing platform scalability and resilience.
- Established Docker containerization and GitLab CI/CD pipelines for consistent and reliable deployments across development and production environments.
- Orchestrated AWS cloud migration using AWS Lambda and API Gateway, modernizing legacy applications and enabling serverless architecture while supporting 8,500+ concurrent users during peak events.

Technologies Used: Java, Spring Tool Suite, Eclipse, Maven, RESTful, Hibernate, Git, Postman, Jira, JWT, JPA, Spring Security, Spring Boot, Spring Data, Apache Kafka, AWS Lambda, AWS API Gateway.

ACADEMIC PROJECTS

Maharishi International University (2025)

Royal Casino: A fully serverless blackjack web application built on AWS, showcasing scalable, secure, and high-performance cloud architecture. React frontend hosted on S3 with CloudFront, backend APIs via Lambda and API Gateway, authentication with Cognito, and data stored in DynamoDB. Features include real-time multiplayer gameplay, user profiles, live leaderboards, and analytics. Infrastructure automated with CloudFormation and CI/CD pipelines, with monitoring via CloudWatch. Technologies: AWS (S3, CloudFront, Lambda, API Gateway, Cognito, DynamoDB, CloudFormation, CodePipeline, CloudWatch), React, JavaScript, HTML5, CSS3, Spring Boot, REST APIs, JWT Authentication.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 10/2027)

Maharishi International University, Fairfield, Iowa

Key Courses: Web Application Programming, Cloud Computing, Algorithms, Enterprise Architecture

Bachelor of Engineering

Port Said University Faculty of Engineering, Port Said, Egypt (07/2022)