

Ehab Dafalla

IRS MBI Clearance

Mobile: [REDACTED]

Summary of Qualifications

Over 10 years of experience focusing on business application systems and cloud solutions using **Amazon Web Services (AWS)** and **Generative AI**. Experience with **Java, Spring, Spring Boot, Microservices, Web Services, SQL, REST** and more.

Proven developer and with excellent communication skills; thoughtful, dependable, and adaptable, with an attention for detail and enjoys problem solving.

Education

Utah State University	MS, Management Information Systems	Dec 2015
University of Khartoum	BS, Statistics & Computer Science	Sep 2013

Certifications

AWS Certified Solutions Architect – Associate , AWS Certified Cloud Practitioner

Work Experience

Java Application Architect, IBM - Internal Revenue Service Jul 2024 - Present

Java, Mainframe, Spring, AWS GovCloud, ECS, ECR, S3 GenAI, CI/CD, Databricks

- Worked on designing/ developing modernized Java application as part of the new event driven architecture (Springboot, Hibernate, Restful API) for IRS BMF modernization
- Worked closely with ALC developers to convert the code into Pseudocode as well monolith Java code that matches the existing logic using a proprietary IBM tool.
- Collaborated on designing and implementing a comprehensive GenAI solution to generate java pseudocode, plain english descriptions and business rules. As well as to refactor and improve the converted java code and generate comments and descriptions using cutting edge LLMs
- Engineered robust ETL pipelines using Java Spark and the DataFrame API on Databricks, automating the ingestion of multi-terabyte datasets from AWS S3 and created legacy mainframe files
- Deployed applications from GitHub on AWS GovCloud utilizing the following container services: Elastic Container Service, Elastic Container Registry, Cloudwatch, SNS, Lambda
- Worked on automating the build, test, deploy process using CI/CD GitHub actions to be rapidly implement fixes and deploy them.
- Helped testers implement a program to compare legacy files with new test files byte by byte

Senior Software Development Engineer, Maximus

Jul 2023 - Jul 2024

Java, JPA, JVM, IBM Z/OS mainframe

- Worked on IRS mission critical java applications for filing seasons
- Developed automated JUnit test cases to improve coverage of applications
- Participated in scrum meetings, onboarding and design discussions
- Learned new technologies such as IBM mainframe, Endeavor and Z/OS

Senior Software Developer VP, Goldman Sachs

Feb 2016 - Jul 2023

Java, Spring, Spring Boot, JPA, Hibernate, Sybase, Drools, REST, JUnit, Mockito, MongoDB, ReactiveX, Postman, HazelCast, HSQL, HTTPS, SVN, IntelliJ, Eclipse, Gradle, Fongo, Camunda

- Worked with business stakeholders to identify areas of opportunity, come up with requirements and discussed various design proposals during sprint planning cycles.
- Lead a team of six junior developers through design, implementation, deployment and support of various deliverables.
- Designed, developed, tested, and maintained an account opening automation flow (Straight through processing) which automated %25 of all accounts opened in Private Wealth Management division.
- Implemented RESTful API endpoints that included complex validations using Drools rules engine to sanitize incorrect input and guide the user with substantive feedback for display in the user interface.
- Implemented an orchestration layer using a Camunda workflow business process modeling (BPMN).
- Created integration layer for legacy application to participate using in modern REST services where conventional client libraries could not be used, and instead empowered the legacy application to be able to interact with the newer micro services.
- Worked on delivering an external facing offering (██████████) that allows clients to create retirement accounts managed by robo-advisors
- Worked on various regulatory projects such as MIFID and GDPR
- Mentored a number of new joiners to help them succeed in their careers.
- Involved heavily with recruiting with an emphasis on diversity recruitment at HBCUs
- Recruited and interviewed engineers for the firm at various levels.