

Charbel Bou Abdo

Software Engineer

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EDUCATION

- Bachelor of Technology in Computer Sciences Antonine University- Baabda, Lebanon
- AWS Certified Solutions Architect
- Certificate Cryptography I Offered By StandFord University Coursera
- Certificate Cloud Computing Specialization offered By University of Illinois

TECHNICAL SKILLS

FrontEnd : JavaScript, HTML, CSS, BootStrap, JavaFx, Java swing awt, Figma

BackEnd : Java, Spring Boot, Docker, RESTFUL, GraphQL, gRPC, SOAP, Eureka, Zuul , JWT, OAuth, Redis, Kafka, Tomcat, NGINX, C#, Hadoop, Spark, JDBC, ARM-V7, Unity

DataBase : MySQL, PostgreSQL, NoSQL, Oracle Data modeler, Hibernate, Cassandra

DevOps : JUnit5, Mockito, Git, JIRA, GitLab, Swagger, JetBrains Space, Maven, Gradle

Cloud : AWS, EC2, EBS, EFS, Lambda, EKS, S3, DynamoDB, RDS, SNS, SQS, S3, Cloud Watch, Aws Fargate, DynamoDB Stream

PROFESSIONAL EXPERIENCE

Java Software Engineer at Orcania

(October 2022- Present)

- Led the development of a cutting-edge, full-stack application for a Decentralized Autonomous Organization (DAO) with Spring Boot and Java, resulting in a 25% increase in user engagement.
- Achieved 90% test coverage through meticulous unit and integration testing, ensuring data integrity and performance.
- Implemented sophisticated caching mechanisms, reducing API response latency by 40% and enhancing property search and retrieval experience.
- Strengthened application security with robust user authentication, TLS certificates

PROJECTS

BlockChain

(October 2023 - Today)

- Developed core blockchain components: Built full node, wallets, and transaction handling, including transaction signing using elliptic curve cryptography and address generation.
- Managed blockchain operations: Oversaw mining, transaction validation, and network syncing, ensuring secure hashing.
- Implemented consensus and security measures: Led the integration of Proof of Work for transaction validation, incorporating elliptic curve hashing to enhance security measures.

2D Game Engine

(February 2021 - May 2022)

- Developed a Java-based 2D game engine with a component-based architecture, facilitating the creation of modular and reusable game entities.
- Achieved 56% speed improvement by implementing multi-threading to optimize performance and responsiveness in the application's game updating and rendering processes.
- Implemented double buffering techniques to eliminate screen tearing , spatial partitioning techniques (quad trees) for collisions detection , camera manager , object pooling .
- Optimized rendering performance through static batching techniques, object culling, minimizing draw calls and enhance overall efficiency by 80% .

E-Commerce API

(September 2019 - June 2020)

- Designed and implemented a robust and scalable RESTful API using the Spring framework, adhering to industry best practices and following RESTful principles, ensuring high performance and maintainability.
- Implemented secure authentication and authorization mechanisms using Spring Security, including JWT, to protect API endpoints and ensure only authorized users can access protected resources.
- Utilized Spring Data JPA to seamlessly integrate with the database layer, implementing complex queries, resulting in optimized data access and improved API response times.