Eliezio **Oliveira**

Lead Senior Software Engineer

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ABOUT ME

Experienced software engineer with a strong computer science foundation, broad technical range, and a relentless focus on designing and delivering robust, well-crafted solutions.

EXPERIENCE

Technical Consultant 📅 Apr 2025 - Sep 2025

RioCard Tecnologia 🔗 | Electronic ticketing tech for public transport | Rio de Janeiro, Brazil (Remote)

- Led the migration of cryptographic services from IBM z/OS ICSF to cloud HSMs (AWS CloudHSM, later Oracle OCI Vault), enabling client applications to start migration three months earlier through HSM abstraction and simplified integration.
- Partnered with the Information Security Group to design and conduct a new key ceremony, ensuring secure key management and compliance during the transition to cloud environments.

> 🛠 Java 17, Quarkus, Microservices, MicroProfile Fault Tolerance, Hexagonal Architecture, REST API, API First, Hashicorp Vault, Docker, Kubernetes, AWS CloudHSM, Oracle OCI, TDD, ATDD, Resilience Testing, Mutation Testing, Prometheus.

Senior Backend Software Engineer 📅 Apr 2022 - Mar 2025

Beeline Inc. 🔗 | Global provider of workforce management solutions | Dublin, Ireland

Contributed to the transformation of the main application to support multi-tenancy and improve scalability, reducing overall operational costs.

- Identified and resolved major performance bottlenecks caused by N+1 query patterns in both GraphQL resolvers and database queries.
- Introduced data loaders across the GraphQL layer and supported their adoption by coaching developers and providing implementation guidance.
- Worked with backend engineers to introduce jOOQ for complex and performance-critical queries, improving query efficiency and maintainability.
- Added integration tests to the CI pipeline to detect and prevent N+1 query issues, ensuring ongoing performance stability.

> 🛠 Kotlin, Spring Boot, SQL, Microservices, GraphQL, REST API, PostgreSQL, JPA/Hibernate, jOOQ, AWS, Docker, Kubernetes, Testcontainers, CI/CD, Gradle, Gitlab

Senior Backend Engineer   📅 Aug 2021 - Mar 2022

Teckro Ltd 🔗 | Clinical trial software platform for pharma and CROs | Limerick, Ireland

Improved server–client integration reliability and eliminated contract mismatches through automation and formalized API governance.

- Introduced a CI-validated OpenAPI specification to formalize server–client contracts, eliminating recurrent integration issues.
- Partnered with front-end developers to automate the generation process using JavaScript scripts, ensuring synchronized schemas and faster delivery cycles.

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Kotlin, Spring Boot, Microservices, OpenAPI 3, REST API, API First, MySQL, TypeScript, Docker
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Contract Senior DevOps Engineer   📅 Aug 2020 - Jul 2021

Aetion Inc. 🔗 | US real-world evidence platform for biopharma and payers | New York, USA (Remote)

Automated the management of temporary database credentials, improving security and efficiency for data analysts' access to production systems. Designed and implemented an infrastructure-as-code solution to provision and revoke temporary MySQL credentials automatically. Developed a self-service Flask application for analysts to manage access requests.

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Python 3, Pulumi, Terraform, MySQL, SAML, AWS (IAM, Lambda, RDS, CodeBuild, ECR, S3, CloudWatch),
Infrastructure-as-Code, Okta, Docker, Testcontainers, CI/CD, Flask, JavaScript, jQuery
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Senior Engineer   📅 Jan 2019 - Jul 2020

Ericsson Software Technology AB 🔗 | Open-source software for telecom innovation | Athlone, Ireland

Strengthened the stability of Ericsson's ONAP CCSDK blueprint models by designing and implementing automated integration tests within the UAT framework, ensuring reliability across frequent upstream releases. This increased release confidence and reduced debugging cycles by integrating UATs into the CI/CD pipeline. You can view my contributions here.

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Kotlin, Python 3, Spring Boot, CI/CD, Jenkins, TDD, ATDD, Docker, WireMock
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Contract Software Developer   📅 Feb 2018

Komodo Platform 🔗 | Secure and customizable blockchain ecosystem | Sliema, Malta (Remote)

Developed a smart command-line client for Komodo's BarterDEX platform that automatically learned and adapted to API changes, simplifying integration and reducing maintenance overhead.

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C, REST API, Google C++ Test Framework, TDD.
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Lead Software Engineer 📅 2008 - 2014, 2016 – 2018

RioCard Tecnologia ↗ | Electronic ticketing tech for public transport | Rio de Janeiro, Brazil

- Resolved major security, performance, and reliability issues in RioCard's contactless card operations by leading the design and development of a unified, server-centric architecture with lightweight terminals and 3rd-party ATM integration.
- Increased system reliability to near-100% under peak loads and expanded the company's service reach through hundreds of 3rd-party top-up venues.

> 🛠 Java, Netty, Websockets, Java Cryptography Extension, TLS, Spring Boot, MyBatis, JavaScript, jQuery, SOLID, HSM, Spock Framework, TDD, C, Google C++ Test Framework, Jenkins, Micrometer, Prometheus, Grafana.

EDUCATION

Bachelor of Computer Science 📅 Apr 2006

Federal University of Rio de Janeiro, Institute of Computing | Ranked 5th in QS Latin America 2025 ↗

> 🎓 Final Year Project: Implementing TLS Extensions on OpenSSL (RFC 3546) ↗

Certifications

- Blockchain Specialization (University at Buffalo)
- Certified Developer for Apache Kafka (Confluent)
- Parallel, Concurrent, and Distributed Programming in Java (Rice University)
- Cryptography I (Stanford)

LANGUAGES

- English: Full Professional Proficiency (C1 Level)
- Portuguese: native