

Maurício Mussatto Scopel

+55 54 99645-1826 | me@mauricioms.dev | [Website](#) | [LinkedIn](#) | [GitHub](#)

SUMMARY

Senior Backend Engineer with 10+ years of experience designing and building scalable microservices in Java and Spring Boot. Specialized in cloud-native architectures on AWS, event-driven systems, and high-traffic platforms. Proven track record delivering end-to-end solutions — from system design to infrastructure — for international companies across e-commerce, music, and sports domains.

SKILLS

Languages: Java

Backend & Frameworks: Spring Boot, Microservices Architecture, GraphQL, RESTful APIs, Mockito, JUnit 5

Cloud: AWS (DynamoDB, RDS, SQS, SNS, S3, CloudFormation, Route53), Docker

Databases: PostgreSQL, DynamoDB

EXPERIENCE

MoveUp, Remote — *Back End Software Developer*

FEBRUARY 2025–NOW

- Built most backend features for a sports prediction platform from its early stages. Grew it to ~15,000 users within a year of launch and enabled several in-platform sponsorship deals.
- Architected end-to-end backend for a game statistics platform using Java/Spring Boot and AWS. Owned full lifecycle, from system design to infrastructure provisioning via CloudFormation. Within this product:
 - Integrated payments via Stripe and Apple (iOS). Collaborated with an external data-service developer to align communication, infrastructure, and security.
 - Designed a multi-layered auth stack: JWT login with refresh-token family rotation and reuse detection, plus email-verification gating in a dedicated security layer.
 - Implemented OpenID Connect for Google sign-in (token verification against Google's keys) and RBAC to gate premium features.
 - Hardened against abuse with two-tier per-user rate limiting (Bucket4J via Valkey), captcha on public endpoints, and input validation to mitigate DoS and user enumeration.
 - Secured sensitive config in AWS Secrets Manager and validated all third-party webhooks via provider-issued signatures.

Encora, Remote — *Back End Software Developer*

APRIL 2024–FEBRUARY 2025

- Delivered features and resolved production issues in the data integration module of a US hospitality platform, ensuring reliable data sync across a PostgreSQL/AWS microservices architecture.
- Automated a legacy monolith's test-suite migration from JUnit 4 to JUnit 5 with an open-source source-to-source translator. Applied compiler techniques (an ANTLR grammar for Java) to parse and rewrite tests, eliminating hundreds of hours of manual refactoring.
- Maintained and extended the integration layer between a legacy monolith and modern microservices using AWS SNS for event-driven messaging, improving data-flow reliability.

BeatStars, Remote — *Back End Software Developer*

AUGUST 2021–JANUARY 2024

- Engineered multi-source query systems combining DynamoDB with search engines (Algolia, TypeSense), powering dynamic product discovery on a high-traffic music e-commerce platform.

- Designed and began implementing a Merkle-tree reconciliation algorithm to cheaply detect sync drift between the DynamoDB source of truth and the Algolia search index, pinpointing only obsolete records to avoid costly full re-syncs.
- Architected a Backend-for-Frontend (BFF) layer in GraphQL, abstracting microservice complexity into a unified, consumer-friendly API.
- Orchestrated event-driven communication across microservices with AWS SQS and SNS, and implemented webhooks via API Gateway for third-party integrations.

CWI, Remote — *Back End Software Developer*

MARCH 2018–AUGUST 2021

- Optimized a Spring Batch credit-analysis pipeline for Riachuelo by tuning JVM parameters and refactoring processing logic, meeting strict execution-time constraints.
- Extracted the shopping-cart module from a legacy monolith into a standalone microservice at Lojas Colombo, improving maintainability and enabling independent deployment.

Keywords, Caxias do Sul — *Systems Analyst / Java Developer*

SEPTEMBER 2013–MARCH 2018

- Full software development lifecycle across diverse clients.
- Progressed to Systems Analyst with mentoring responsibilities.
- Oracle Certified Associate and Professional Java SE 7.

SELECTED PROJECTS

JUnit 4 to JUnit 5 Translator

Source-to-source translator that automatically migrates JUnit 4 tests to JUnit 5, using compiler techniques (an ANTLR grammar for Java) to parse and rewrite test code. Eliminated hundreds of hours of manual refactoring. GitHub: [junit4to5-translator](#)

Confiança Accounting Office

End-to-end communication platform (mobile app, backend, infrastructure) for an accounting office, enabling real-time messaging and document access with push notifications. [App Store](#)

Motor Imagery Recognition using EEG and Deep Learning

Bachelor's thesis proposing a CNN-1D architecture for subject-independent motor imagery classification from EEG signals. Demonstrated that removing electrode spatial convolutions and replacing LSTM with temporal-only CNN improved performance — achieving 82.11% accuracy on binary classification (PhysioNet) and a 15.86% relative improvement over feature-engineering approaches (BCI Competition IV II-A). Applicable to Brain-Computer Interfaces for assistive technologies. GitHub: [motor-imagery](#) | [motor-imagery-deep-learning](#)

Vida em 8 Bits

YouTube channel and blog (Portuguese) on Computer Science fundamentals, studies, and personal projects. [YouTube](#) | [Blog](#)

EDUCATION

UCS, Caxias do Sul — *Degree in Computer Science* (2013–2020)

LANGUAGES

Portuguese (native), English