Oskar Flores

Tech Lead

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Summary

Backend engineer since 2008, now a tech lead building serverless platform services on AWS in TypeScript.

I design shared services that product teams build on, so each app doesn't have to solve auth, secrets or installation handling on its own. I apply Domain-Driven Design day to day, and in 2025 I wrote a short book about using it in serverless applications.

Before that I spent years on data pipelines, streaming and cloud migrations, mostly in Java and Scala.

Experience

Appfire, Tech Lead — Apr 2022 – present — 4 years 7 months

Tech lead for serverless platform services on AWS, used by multiple product apps.

- Built a shared, serverless key management service: apps authenticate through our common auth layer and get their keys for external services, without storing secrets
- Built an installation management service that tracks installs across products, stores their data and refreshes tokens, so apps don't have to
- Design serverless architectures in TypeScript with Lambda, API Gateway, DynamoDB, SQS, SNS and Step Functions
- Introduced Domain-Driven Design and Clean Architecture, cutting technical debt by around 20%
- Mentor a team of 6 developers on serverless design, testing and CI/CD
- Moved critical processing onto SQS queues so failures are retried instead of lost, improving reliability by around 25%
- All infrastructure defined in AWS CDK with automated tests in every pipeline; projects delivered around 15% ahead of schedule

Comalatech, Backend Software Engineer — Nov 2018 – Sept 2022 — 3 years 11 months

Apps for Atlassian Confluence. I worked on the Comala document management and workflow apps, among the most used on the Atlassian Marketplace.

- Built serverless APIs with Lambda, API Gateway and DynamoDB
- Part of the move from servers to serverless, which cut running costs by around 40%
- Connected services through SQS and SNS
- Pushed for automated tests on every change, which cut production bugs by around 25%
- New features and ongoing maintenance for the Comala workflow apps

Isetic, Big Data / Backend Developer — Feb 2018 – Nov 2018 — 10 months

Isetic built Zeus, a cloud platform that monitored industrial machines and predicted failures. The company closed in late 2018.

- Built a machine learning pipeline and API for anomaly detection on industrial IoT machines
- Designed distributed, multi-threaded Java processors fed by RabbitMQ and Amazon Kinesis, with Redis for shared state and caching
- Wrote a Java service that read data from PLCs, aggregated it and stored it in DynamoDB
- Built Spring Boot APIs, packaged with Docker and deployed on AWS container services
- Provisioned EC2 and Lambda with Ansible; CI/CD with Jenkins
- Unit and integration tests with JUnit and Cucumber

Ve Interactive / Ve Global, Big Data / Backend Developer — Jan 2016 – Feb 2018 (2 years 2 months)
Product recommendation APIs on Mesos/Marathon, backed by real-time processing with Apache Storm and HBase.

- Real-time pipeline with Storm and Kafka; downstream processing in Scala and Spark
- Recommendation APIs built with Spring Boot and Docker
- Service metrics collected in InfluxDB and Grafana for monitoring
- Unit and integration tests with JUnit and Cucumber, in a CI/CD pipeline

Ve Interactive, DevOps Engineer — Feb 2015 – Jan 2016 (1 year)
Moved the company's on-premise infrastructure to Azure.

- Migrated more than 400 machines to Azure
- Fully automated environments with Puppet and Azure Resource Manager templates

Deloitte, Software Developer — Jan 2013 – Feb 2015 (2 years 2 months)
Analysis and development of the Basque Government's environmental management platform, integrated with its e-administration platform, PLATEA.

- Java, EJB and JSP on WebSphere

Datinet, Software Developer — June 2008 – Jan 2013 (4 years 8 months)
Consultancy work in Java and C# for clients including Osakidetza (Basque Health Service), Liberty Seguros and Iberdrola.

- Java, EJB and JSP on WebSphere, with Oracle databases

Publications

Domain-Driven Design in Serverless Applications — 2025
A practical guide, about 100 pages, on structuring serverless applications with DDD patterns that hold up in production.
Oskar Flores
book.oskar.engineer (Self-published)

Education

University of the Basque Country (UPV/EHU) — 2003 – 2008
Technical Engineering in Computer Systems

Mikeldi Training Centre, Bilbao — 2000 – 2002
Higher Vocational Diploma in Software Development

Skills

AWS Serverless: Lambda, API Gateway, DynamoDB, SQS, SNS, Step Functions, AWS CDK

Architecture: Platform engineering, Domain-Driven Design, Clean Architecture, event-driven systems, microservices

Languages and frameworks: TypeScript, Java, Spring Boot, Scala, Python

Data and messaging: Kafka, Kinesis, RabbitMQ, Spark, Storm, Redis, HBase, Elasticsearch, Oracle, MySQL

Testing and delivery: JUnit, Cucumber, CI/CD, Jenkins, TeamCity, Docker

Platform and infrastructure: Infrastructure as code, Ansible, Puppet, Azure

Languages

Spanish: Native

English: Advanced (C1)