

■ Francisco Revelles — Senior Full-Stack Engineer

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Summary

Senior Full-Stack Engineer with 15+ years of experience delivering secure, scalable applications in healthcare, finance, telecom, and federal programs. Expert in **Java/Spring Boot, React, Docker, and AWS**. Proven record of stabilizing marketplaces and mission-critical systems under budget constraints, with emphasis on **containerization, cloud migration, backup/recovery, and TDD**. Skilled in **leveraging GPT-assisted development** to accelerate delivery timelines from months to days.

Technical Skills

- Frontend: React, Redux/RTK Query, TypeScript, Next.js, Angular, Flutter, Jest, Cypress
- Backend: Java (Spring Boot, Spring Cloud, Spring Security), Node.js, Laravel/PHP, REST/GraphQL APIs
- Cloud & DevOps: AWS (ECS [EC2 launch type], ECR, S3, EC2, RDS, Lambda, API Gateway, IAM), Docker (extensive containerization), Kubernetes (EKS primer), Cloud Foundry
- CI/CD: Jenkins, GitHub Actions, GitLab CI, Concourse (Jenkins-based CI/CD experience maps directly to CloudBees in JD)
- Databases: MySQL, PostgreSQL, Redis, MongoDB, Oracle
- Practices: Agile/Scrum, TDD, Pair Programming, Clean Code, Accessibility (a11y), UX best practices

Professional Experience (Chronological)

Independent Consultant — Marketplace Project (Jun 2024 – Present)

- Designed and built a full-stack SaaS Marketplace with React frontend and Spring Boot backend.
- Containerized full stack (Spring Boot, PostgreSQL, Redis, Nginx) with Docker Compose.
- Developed cost-aware AWS deployment path: EC2 → ECS on EC2 + ECR/S3 → ECS on Fargate.
- Implemented JWT authentication and RBAC dashboards.
- Piloted CI/CD pipelines with Jenkins and GitHub Actions.
- Leveraged GPT for scaffolds, APIs, and tests — accelerating delivery timelines while maintaining quality.

Senior Full-Stack Engineer (Contract) — Boulou Marketplace (Oct 2022 – Jun 2024)

- Built and integrated Boulou Service Marketplace with Spring Boot backend and Flutter apps.
- Deployed on AWS EC2 and Docker containers under strict budget constraints.
- After an EC2 rollback wiped un-backed-up changes, implemented an AWS backup plan (DB snapshots + S3).
- Containerized Laravel/Flutter stack to eliminate server-side edits.
- Integrated Stripe payments and external data ingestion with Python + Selenium.
- Proposed Jenkins-based CI/CD pipelines.
- Used GPT to accelerate containerization and troubleshooting.

Full-Stack Engineer — Kessel Run (US Air Force Program via Altors) (May 2020 – Oct 2020)

- Built React apps + Spring Boot APIs for ODIN F-35 aircraft scheduling system.
- Practiced pair programming and TDD; applied refactoring patterns.
- Tested APIs with Spring Cloud Contract, JUnit, Cypress, Jest.
- Deployed in Cloud Foundry; managed builds with Concourse/GitLab CI.
- Used Docker containers for deployment/local parity.

Sr. Java Developer — Pearson Education (Dec 2018 – Aug 2019)

- Led redesign of Pearson Writer from monolith to containerized microservices with Spring Boot, JHipster, Kubernetes, Jenkins.
- Designed REST APIs (Swagger/OpenAPI), Angular/Vue.js frontends, and aggregate services.
- Deployed hybrid-cloud (AWS + Kubernetes) with Vault, Consul, Nginx.

Integration Developer — Northeastern University (2014 – 2017)

- Built mobile/web apps with Node.js, Angular, Ionic, Groovy/Grails, Spring Security.
- Developed batch apps with Spring Boot Batch and REST APIs exposing Banner Student data.
- Integrated social logins and push notifications into campus apps.

Java Developer — Infosys (Financial Services & Insurance) (2012 – 2014)

- Designed data acquisition/integration frameworks using Spring Core, Batch, Integration.
- Built Java components for reference data ingestion.
- Tech: Java, Spring, iBatis, Oracle, Maven, SoapUI.

Java EE Developer — Santander Bank (ISBAN / Sovereign Bank) (2010 – 2011)

- Developed integration solutions for Financial Crime Control with Partenon (Cobol) and Alhambra (Java EE).
- Built batch/online solutions for payments and compliance (ACH, SEPA, SWIFT).
- Supported Sovereign → Santander migration, redesigning DDR/DDS/MDL components.
- Tech: Java EE, EJB, JMS, MQ, WebSphere, Oracle.

Java Developer — Department of Treasury (Puerto Rico) (2009 – 2010)

- Built Java/Spring MVC apps for taxpayer data validation and incentive distribution.
- Integrated with mainframe processes; delivered taxpayer-facing ASP.NET/AJAX solution.

Software Engineer — Claro Puerto Rico / Amdocs (Telecom / IPTV/DSL) (2008 – 2009)

- Designed and developed SOA integrations between Oracle TBS M6 provisioning and the Amdocs Ensemble billing system using J2EE (EJBs, Axis2, WebLogic, Tuxedo).
- Built APIs for credit verification, deposit, IPTV billing as EJB web services.
- Conducted APILink testing (unit, integration, stress, UAT) with SoapUI, JMeter, TestDirector.
- Migrated 250+ wireline billing interfaces into real-time APIs.
- Integrated billing data with Cognos BI for tax reporting.
- Delivered IPTV/DSL update and TELCO activity monitoring tools (Java/Spring/Quartz).

Programmer — Gauss Research Lab (1998 – 2004)

- Built .pr domain registration applications in ASP, VB, C#, MS SQL.
- Developed mathematical software in C/C++/Java for Finite Fields, Costas Arrays, Sonar Sequences.

Research & Publications

Researcher — Mathematical Structures & AI

University of Puerto Rico (2000s–2003s) & Independent Research (2023–Present)

- Finite Fields & Signal Design (UPR): Co-developed Extended Costas Arrays, Quasi-Costas Arrays, Extended Quasi-Costas Arrays with Dr. Oscar Moreno et al. Defined new algebraic structures via finite fields and periodicity. Conducted computational searches, filling 35 unknown gaps in Costas arrays up to n=360.
- AI & Modular Arithmetic (Independent Research): Authored papers on finite fields + LLMs, proposing LLMs as modular systems (helix encoding, prime-field reasoning). Published 'Large Language Models and Modular Arithmetic Modulo a Prime p' and 'What Prime Fields Can Teach Us About Building Smarter Language Models.' Explored applications in cryptography, error correction, interpretability, symbolic reasoning.

Education

B.S. Computer Science & Mathematics — University of Puerto Rico, San Juan

NSF CSEMS Scholarship Awardee

Certifications & Training

Recent (2021–2022):

- AWS DevOps, AWS Cloud Practitioner Essentials, AWS IAM Essentials
- Docker & Kubernetes (DevNation)
- Spring Boot (In28Minutes, Dan Vega, Ken Krueger)
- Data Science with Python

Additional (Pre-2020):

- Microservices with Spring Cloud (Ken Krueger)
- Master Java Web Services & REST API with Spring Boot (In28Minutes)
- Introducing Spring Boot (Dan Vega)
- Learn Spring Boot: Rapid Application Developer (Dan Vega)
- Automate the Boring Stuff with Python Programming (Al Sweigart)
- Git Complete (Jason Taylor)
- MongoDB for Java Developers

- Informatica PowerCenter Developer