



Eduardo Castro

Senior Software Engineer

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Merida, Mexico | Mexican Citizen

10+ years of professional experience, including key roles at global firms like Oracle and Deloitte. Specialist in Java/Spring Boot, SQL and cloud-native deployments (AWS, Docker, Kubernetes). Proven track record implementing scalable backend architectures.

Hands-on experience of Python ecosystem and AI integrations with OpenAI SDK for Java.

Currently focused on AI-Augmented Development and Spec-Driven Development to accelerate the SDLC.



Education

Bachelor of Science (B.S.) in Computer Engineering

Universidad Autónoma de Yucatán (UADY) - Faculty of Mathematics
Merida, Yucatan, Mexico
2009-2014

Certifications

Machine Learning

Stanford Online / 2023

Certified Associate Java 8

Oracle / 2018

Mentorship & Tech Talks

Neural Networks in Android

Tech Talks @ Ksquare & UADY

Seminar on TensorFlow Lite and Android for on-device real time AI integration - 2018

Technical Instructor

Trainee Program @ Plenumsoft

Designed and delivered workshops on Python Algorithms, and Android Development for undergraduate interns - 2017

Languages

Spanish - Native

English - Complete Professional Competence

Skills

- **Backend & Architecture:** Java, Spring Boot (Expert), REST APIs, Microservices Patterns, JPA/Hibernate, Spring Data, Spring Security, Kafka, Spring Kafka, Python/Django
- **Cloud & DevOps:** AWS (EC2, S3, Lambda, ECS, EKS), Docker, Kubernetes, Elasticsearch (ELK stack), Gitlab CI/CD, Linux (Bash, SSH)
- **Data & Storage:** SQL (PostgreSQL, Oracle DB), Elasticsearch, Redis
- **Secondary Skills:** React, Javascript, HTML5, CSS3
- **Agentic Workflows:** Spec-Driven Development, Claude Code, Open Code, Cursor
- **Data Science & AI:** Python, Pandas, NumPy, Scikit-learn, OpenAI SDK for Java
- **SDLC & Tools:** Agile/Scrum, Jira, Confluence

Experience

- **Deloitte - Senior Software Engineer**
(Jan 2024 - Current)
- **Oracle - Senior Applications Engineer**
(Sep 2019 - Jan 2024)
- **IBM - Senior Java Developer**
(May 2019 - Sep 2019)
- **Macy's Inc. - Java Developer**
(Oct 2018 - May 2019)
- **Ksquare Labs - Java Developer**
(Apr 2018 - Oct 2018)
- **PlenumSoft - Software Engineer**
(Nov 2015 - Apr 2018)
- **Touchtastic - Android Developer**
(Jan 2015 - Nov 2015)

Experience Details

Deloitte - Senior Software Engineer (Jan 2024 – Current)

Mainframe/COBOL to Java 17 Migration (for the Government of Australia)

- Development and debugging the migrated application to ensure full feature parity with the legacy system.
- Implemented unit tests using JUnit 5 and Mockito.
- Analysis and debugging of regression issues related to functional disparity.
- **Stack used:** Java 17, Spring Boot, Hibernate, IBM DB2, Junit5, Mockito3, git.

Research Automation System (for one of the world's leading companies in the entertainment and media sector)

- System that generates newsletters and reports using LLM API integration. The generated reports are tailored to preferences and current project of the employees.
- Architected and implemented distributed backend system using Java, Spring Boot, OpenAI SDK, Jira Webhooks, and AWS, among other technologies. Also implemented some of the React components in frontend side.
- Documented the design, implementation, DB schemas and integration of the components using Confluence.
- **Stack used:** Java 17, PostgreSQL, Hibernate, Spring Kafka, Jira Webhooks, AWS (Lambda functions and S3), OpenAI SDK, git, Gitlab CI/CD, docker, React.

Oracle - Senior Applications Engineer (Sep 2019 – Jan 2024)

Oracle Fusion Applications (Expenses Management Module)

- Developed new features and unit tests for the RESTful Java service supporting the functionality of this ERP module.
- Analysis and solution of bugs related to the backend application and PL/SQL routines in Oracle DB.
- **Stack used:** Java, Oracle DB, Linux (RHEL remote VMs), PL/SQL.

Pre-merge Code Quality System (CLI and Web)

- Designed and implemented new features for the REST service (Python-Django), frontend (HTML5-CSS3) and core validation scripts (Python and Bash).
- Migrated the database from Oracle to Elasticsearch (ELK Stack) for data storage and system monitoring.
- Upgraded the system from Python 2 to Python 3.
- Implemented bug fixes which significantly improved the system reliability and performance.
- **Stack used:** Python 3, ELK stack, Django Framework, git, Jenkins, Linux (RHEL remote VMs), cronjobs, Bash scripting, HTML5, CSS3, Javascript.

IBM - Senior Java Developer (May 2019 – Sep 2019)

Web App for the management of users and accounts (USAA Bank).

- Performed analysis, debugging and bug fixes on the existing code base of backend application (RESTful and SOAP services).
- Implemented new features on the backend service.
- Designed and Implemented of base components to be used by the new version of the frontend using React.js.
- **Stack used:** Java 8, Spring Boot, IBM DB2, Linux (RHEL remote VMs), WebSphere, Junit, React.js, SoapUI, Jira.

Macy's Inc. - Java Developer (Oct 2018 – May 2019)

Inventory Management System

- Performed backend maintenance, debugging and bug fixes for the existing REST API services and database procedures.
- **Stack used:** Java 8, Spring Framework, Hibernate, Oracle DB, PL/SQL, Glassfish, Jira.

Ksquare Labs - Java Developer (Apr 2018 – Oct 2018)

Restaurant Management Application

- Implemented backend API services in Java, following the RESTful design principles (pagination, sorting, etc.).
- Implemented new features and maintenance of the frontend (Java Swing Desktop application).
- **Stack used:** Java 8, Spring Boot, Hibernate, PostgreSQL, Spring Data, git, Java Swing UI.

PlenumSoft - Software Engineer (Nov 2015 – Apr 2018)

Last Mile Delivery Tracking and Monitoring

- Performed research and development of algorithms related to supply chain sector including routing with geospatial data, fuel consumption, and processing of sensor data.
- Design, development and testing of Android application to gather and send data (GPS, gyroscope and accelerometer) generated by fleet drivers for tracking and monitoring of their driving behavior.
- **Stack used:** Python, Pandas, NumPy, Scikit-learn, Jupyter Notebook, Java, Android SDK, PostgreSQL, PostGIS, SQLite.

Touchtastic - Android Developer (Jan 2015 – Nov 2015)

- Worked in the whole SDLC related to Android native applications from planning and design through deployment to the Google Play Store.
- **Stack used:** Java, Android SDK, SQLite, Android Studio, git, Bitbucket, Google Maps API, OAuth2, Firebase.