



Carlos Pineda

Software Engineer

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Passionate and detail-oriented Software Engineer with a strong foundation in developing scalable and maintainable software solutions. Specializing in Java, Spring Boot, and backend development, I bring expertise in Clean Code, Clean Architecture, and SOLID principles. Skilled in building robust systems, managing complex data processes, and deploying cloud-based solutions. Currently preparing for the Oracle Certified Professional (OCP) Java 17 Developer certification.

Personal Portfolio:

<https://portfolio-go-s300.onrender.com/> New Version

<https://carlospineda.netlify.app/> Old Version

EXPERIENCE

CODE Éxitos, San Pedro Sula

August 2024 - Present

LMS Software Developer

Designed and implemented learning management system features for enhanced user experience. Developed scalable backend systems with Java and Spring Boot. Adhered to Clean Architecture principles, ensuring maintainable and testable code.

San Services Honduras, San Pedro Sula

November 2023 - August 2024

Software Engineer

Developed backend systems ensuring high performance and scalability. Built RESTful APIs using Spring Boot for seamless client-server communication. Integrated APIs to streamline business processes, focusing on scalable architectures.

Onetouch, San Pedro Sula

September 2023 - June 2024

Back End Developer

Develop robust server-side applications with NodeJS.

Nova Casa, San Pedro Sula

May 2023 - August 2023

Full Stack Developer

Developed full-stack web applications with a focus on seamless user experience.

DESOFIW

June 2022 - November 2022

Software Developer

EDUCATION

Universidad Católica de Honduras 'Nuestra Señora Reina de la Paz'

January 2020 - June 2023

Bachelor of Science - BS, Computer Science

During my Bachelor of Science in Computer Science at Universidad Católica de Honduras 'Nuestra Señora Reina de la Paz', I honed a variety of skills.

- I developed proficiency in troubleshooting and back-end web development, which allowed me to solve complex problems and contribute to team projects.
- I enhanced my communication skills, which helped me to effectively collaborate with team members and stakeholders.
- I mastered Object-Relational Mapping (ORM), which improved my efficiency in managing databases.
- I demonstrated my ability to multitask and pay attention to detail, which increased my productivity and the quality of my work.
- I became proficient in Microsoft Office, software development, and computer science, which broadened my technical skill set.
- I learned HTML5 and front-end development, which expanded my capabilities in web development.

Instituto Gubernamental Juventud Hondureña

January 2017 - November 2018

High School Diploma

- Completed High School education at Instituto Gubernamental Juventud Hondureña, earning a High School Diploma.

C.E.B Elisa Ch. de Cardona

Present

Elementary School

SKILLS

Programming Languages:

- Java
- JavaScript
- TypeScript
- Go
- PHP
- NodeJS
- SQL

Frameworks, Libraries and Tools:

- Spring Boot
- Hibernate
- React
- Spring Data
- Spring Batch
- Kubernetes
- Docker

Web Development:

- HTML
- CSS
- JavaScript
- TypeScript
- React

Software Design:

- Clean Code
- Clean Architecture
- SOLID Principles

Database Management:

- PostgreSQL
- Couchbase
- Oracle Database
- MySQL
- MongoDB

Cloud Platforms:

- AWS
- DigitalOcean

DevOps & CI/CD:

- Jenkins
- ArgoCD
- Kubernetes
- Github Actions
- JFrog Artifactory
- SonarQube

Other Tools:

- Postman
- Github

CERTIFICATIONS

SQL (Basic) Certificate

HackerRank

Show credential

Apr 2025

Software Engineer Intern Certificate

HackerRank

Show credential

Apr 2025

Java (Basic)

HackerRank

Show credential

Apr 2025

DevOps Complete Course

Apr 2025

Coursera	
Show credential	
Advanced DevOps Tools and Practices	Apr 2025
Coursera	
Show credential	
Build Automation and Continuous Integration	Mar 2025
Coursera	
Show credential	
Advanced Git and GitHub Practices	Mar 2025
Coursera	
Show credential	
Foundations of DevOps and Git	Mar 2025
Coursera	
Show credential	
English Proficiency Certificate	Jan 2025
Duoling English Test	
Show credential	
Software Engineering: Modeling Software Systems using UML	Apr 2024
Coursera	
Show credential	
AWS Cloud Technical Essentials	Nov 2024
AWS (Amazon Web Services)	
Show credential	
EF SET English Certificate 73/100 (C2 Proficient)	Aug 2024
EF SET	
Show credential	
Arquitectura Software Moderna: DDD, Eventos, Microservicios	Jan 2024
Udemy	
Show credential	
Learn Spring Boot 3 in 100 Steps - No 1 Java Framework	Dec 2023
Udemy	
Show credential	
Spring Framework Master Class - Java Spring the Modern Way	Nov 2023
Udemy	
Show credential	
The Complete JavaScript Course 2023: From Zero to Expert!	May 2023
Udemy	
Show credential	
Databases and SQL for Data Science with Python	Feb 2023
IBM	
Show credential	
Tools for Data Science	Feb 2023
IBM	
Show credential	
Master en PHP, SQL, POO, MVC, Laravel, Symfony, WordPress +	Jan 2023
Udemy	

[Show credential](#)

What is Data Science?

Jan 2023

IBM

[Show credential](#)

Crash Course on Python

Jul 2022

Google

[Show credential](#)

Data Engineering Essentials

Jul 2022

IBM

[Show credential](#)

Introduction to Data Engineering

Jul 2022

IBM

[Show credential](#)

Python for Data Science, AI & Development

Jul 2022

Coursera

[Show credential](#)

Introduction to Git and Github

Jun 2022

Introduction to Git and GitHub

[Show credential](#)

Questions, Present Progressive and Future Tenses

Mar 2022

Coursera

[Show credential](#)

Specialization: Learn English: Beginning Grammar

Mar 2022

Coursera

[Show credential](#)

Simple Past Tense

Mar 2022

Coursera

[Show credential](#)

Word Forms and Simple Present Tense

Mar 2022

Coursera

[Show credential](#)

CCNA: Introduction to Networks

Aug 2021

Cisco

[Show credential](#)

PROJECTS

AssignPro Backend

AssignPro Backend is a microservice application tailored for managing bulk content assignments, user status updates, and learning path operations. Designed for educational or corporate training platforms, it simplifies large-scale processes by offering efficient, secure, and well-structured backend solutions.

Technologies:

- Frameworks and Libraries: Spring Boot, Spring Data JPA, Spring Security
- Database: PostgreSQL, Flyway for migration
- Integration and Communication: RESTful APIs, AWS Cognito for authentication and authorization
- Architecture: Domain-Driven Design (DDD) with Hexagonal Architecture
- Mapping: MapStruct for DTO and entity transformations
- Containerization: Docker

Results:

- Successfully manages bulk operations for content assignments and user status updates, ensuring transactional consistency.
- Provides seamless integration with external Learning Management Systems (LMS) via ports and adapters.

- Facilitates secure and scalable API-driven content and learning path searching.
- Ensures maintainability and scalability with modular architecture and clean separation of concerns.
- Simplified deployment process with containerized Docker support and database versioning through Flyway.

AssignPro Client

A modern web application designed for efficient bulk data processing and management, featuring real-time tracking, detailed history views, and comprehensive filtering capabilities. This system streamlines large-scale data operations while providing users with intuitive controls and detailed feedback on their processes.

Technologies:

- Frontend Framework: React 19.0.0
- Programming Language: TypeScript 5.7.2
- UI Framework: Material-UI (MUI) 7.0.2
 - MUI X Data Grid
 - MUI X Date Pickers
 - MUI Icons
- Routing: React Router 7.5.3
- HTTP Client: Axios 1.9.0
- Build Tool: Vite 6.3.1
- Date Handling: date-fns 4.1.0
- Styling: Emotion (CSS-in-JS)
- Code Quality:
 - ESLint
 - TypeScript ESLint

Results:

1. Enhanced User Experience:
 - Implemented responsive design that adapts seamlessly across all device sizes
 - Built an intuitive interface for complex data operations
 - Integrated real-time status updates and error feedback
2. Technical Excellence:
 - Developed reusable, type-safe components using TypeScript generics
 - Implemented server-side pagination and sorting for optimal performance
 - Created a comprehensive filtering system with date ranges and status filters
3. Maintainability and Scalability:
 - Established a modular component architecture
 - Implemented consistent error handling patterns
 - Created type-safe interfaces for data management
 - Maintained clean, documented, and maintainable code structure
4. Performance Optimization:
 - Implemented efficient data loading with pagination
 - Optimized component rendering
 - Built with modern React practices for optimal performance

LMS User Creation Processor

The LMS User Creation Process Application is a backend service designed to automate and manage the creation of users and the assignment of licenses in a Learning Management System (LMS). It ensures seamless integration of user data, group configurations, and license assignments across both databases and the LMS platform.

Technologies:

- Programming Language: Java 21
- Framework: Spring Boot (with Spring MVC and Spring Data JPA)
- Database: PostgreSQL - including Flyway for database versioning
- Cloud Integration: Amazon S3 for file handling and storage
- Containerization/Orchestration: Docker and Terraform
- Build Tools: Maven
- Others: SLF4J for logging, Lombok for code simplification

Results:

- License Assignment Automation:
 - Automated the assignment of licenses for LMS users based on job titles, group locations, and organizational hierarchies.
 - Reduced manual intervention and streamlined the user onboarding process.
- Seamless Integration:
 - Successfully integrated with LMS, enabling real-time communication to assign licenses for both learners and managers.
- Error-Handling & Robustness:
 - Implemented custom exception handling, improving application reliability during runtime.
- Infrastructure Optimization:
 - Leveraged Docker for easy deployment and Terraform for managing infrastructure, ensuring scalability and maintainability.

- Scalable Architecture:
 - Built a domain-driven service-oriented architecture, demonstrating modularity and ease of future extensibility.

Knowledge Builder Report Server

This project is a backend reporting module designed to generate and export comprehensive administrative reports for educational or assessment platforms. It provides RESTful API endpoints to create Excel reports and JSON data for feedback, attempt summaries, item analysis, and SAFMEDS attempts, supporting advanced filtering and data aggregation.

Technologies:

- TypeScript
- JavaScript
- NestJS
- npm
- ExcelJS
- Swagger (OpenAPI)
- MongoDB (via service integration)

Results:

- Automated generation of detailed Excel reports for feedback, attempt summaries, and item analysis.
- Export of SAFMEDS attempt data in JSON format.
- Advanced filtering and aggregation for customized reporting.
- Modular, maintainable codebase with strong validation and error handling.
- Enhanced administrative insight into user performance and assessment analytics.

PayBridge

Developed a comprehensive payroll management API to automate and optimize payroll processes for organizations.

Technologies: Java, Spring Boot, Hibernate, PostgreSQL.

Results: Designed and implemented RESTful endpoints with Spring Boot to manage employee and payroll data. Automated complex payroll calculations, improving accuracy by 95%.

Smartsheet Data Processor

Smartsheet Data Processor is a serverless application that automates the extraction, transformation, and loading (ETL) of data from SmartSheets into downstream systems. This solution ensures seamless data validation and integration, enabling organizations to improve their workflows and data processing efficiency while minimizing infrastructure overhead through AWS Lambda scalability.

Technologies:

- Programming Language: Java 17
- Cloud Services: AWS Lambda (serverless architecture)
- Database: PostgreSQL, managed with Hibernate ORM
- Database Migrations: Flyway
- API Integration: Smartsheet SDK
- Data Management: JSON-B for flexible data storage and processing
- Utility Libraries: Agroal (connection pooling), Lombok (boilerplate reduction)

Results:

- Scalability and Cost Efficiency: Utilized AWS Lambda for highly scalable, serverless processing with minimal operational costs.
- Reliable Data Automation: Streamlined data synchronization workflows for SmartSheet integrations with robust ETL capabilities.
- Improved Data Integrity: Implemented validated field types and seamless data transformations ensuring accuracy in downstream systems.
- Extensibility: Designed a modular and configurable architecture, enabling adaptability for future business needs.
- Ease of Deployment: Simple deployment pipeline leveraging Maven for builds and Flyway for database schema management.

Smartsheet Bath Process

This project is a Spring Boot application that automates the import and processing of form data from CSV files into a PostgreSQL database, integrating with the Smartsheet API. It leverages Spring Batch for efficient, chunk-based data processing and uses JPA/Hibernate for ORM mapping of entities such as forms, fields, and records.

Technologies:

- Java 17
- Spring Boot
- Spring Batch
- Spring Data JPA (Hibernate)
- PostgreSQL
- Maven
- Lombok
- OpenCSV
- Smartsheet Java SDK

Results:

- Automates large-scale form data ingestion and transformation from CSV to database.
- Ensures robust transaction management and error handling during batch processing.

- Provides seamless integration with Smartsheet for data synchronization.
- Modular and maintainable codebase following best practices in modern Java development.

Centria Reporting System

This project is a serverless data processing and reporting system for an educational platform. It automates the generation and delivery of learning progress and license compliance reports, integrating with AWS services and a Redshift data warehouse.

Technologies:

- Python
- AWS Lambda (serverless)
- AWS S3 (file storage)
- AWS SES (email delivery)
- AWS Secrets Manager
- Amazon Redshift (data warehouse)
- psycopg2 (PostgreSQL/Redshift connector)
- CSV, JSON, and email handling libraries

Results:

- Automated daily and scheduled generation of learning progress and license compliance reports
- Secure storage and retrieval of reports in S3
- Automated email delivery of reports to stakeholders
- Scalable, modular, and maintainable architecture suitable for enterprise environments

Booking Relay System (BRS)

Developed a reservation transfer system to synchronize bookings from OBE Next Gen to a centralized Oracle Database.

Technologies: Java, Spring Boot, Spring Batch, Spring Framework, Spring Data, PostgreSQL, Oracle Database, Couchbase, Kubernetes, SQL, Postman, GitHub, Project Lombok, ArgoCD.

Results: Built an efficient pipeline for real-time data transfer from OBE to Oracle Database. Utilized Couchbase as a temporary storage layer for optimized synchronization. Processed massive data loads with Spring Batch for reliability and accuracy.

OBE Next Gen

<https://obe.beaches.com/>

Developed the backend for a vacation booking web application used by Beaches and Sandals. The platform enables users to manage lodging, flight reservations, and additional services.

Technologies: Java, Spring Boot, Spring Batch, Spring Framework, Spring Data, PostgreSQL, ArgoCD, Kubernetes, SQL, Postman, GitHub, Project Lombok.

Results: Designed and implemented an MVC-based architecture with Spring Framework. Automated booking processes and data management using Spring Batch. Implemented batch processing tasks to handle massive data loads with efficiency. Achieved scalability and seamless deployments with Kubernetes.

GoFood

Created an API for delivery app to monitor and manage real-time operations for food delivery platform. Includes detailed analytics panels, user statistics, and tracking of top-selling products.

Results: Implemented CI/CD pipelines with Jenkins for automated deployments. Designed and integrated RESTful APIs using Node.js and Express.js. Optimized database queries with Sequelize and PostgreSQL for efficient processing. Incorporated Redis and Socket.io for real-time notifications.

Technologies: Jenkins, Node.js, Sequelize.js, Express.js, PostgreSQL, AWS, DigitalOcean, Redis, Socket.io, RESTful APIs, CI/CD, Nx, GitHub, Postman API.

NovaCasa Dashboard

<http://novacasa.netlify.app/>

Developed a web application for real estate property management. The platform enables users to manage properties, perform advanced searches, and update information in real time, optimizing sales and rental processes.

Technologies: Node.js, MySQL, HTML, Bootstrap, JavaScript.

Results: Created an interactive dashboard with advanced search capabilities and personalized filters. Implemented a responsive design to enhance user experience on mobile and desktop devices. Integrated features to import and manage large volumes of property data.

Personal Portfolio

March 2024

Developed a personal portfolio using a modern stack, which included Laravel as the framework, Blade for view engine, SASS for styling the page, and the latest JQuery 4 for DOM manipulation through JavaScript