

# Daniel Fonseca da Silva

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## EDUCATION

### Estácio de Sá University

Feb 2017 / Dec 2020

Bachelor (Information Systems)

Overall GPA: 8.5/10

Project Management, Internet of Things (IoT), Computer Networks, Information Security, Data Modeling, Mobile Programming, Data Structures,

Object-Oriented Programming (OOP), Software Engineering, Programming Logic, Cloud, Discrete Mathematics, Linear Algebra, Differential and Integral

Calculus, Business Intelligence

## EXPERIENCE

### Leroy Merlin - Portugal

Remote

Software Engineer (Freelance)

Dec 2024 – Present

- Designed a robust and scalable payment orchestration system, focused on modernizing and optimizing existing payment methods SIBS and Pyxis.
- Designed and implemented a payment method using queue from rabbitmq and rest api with parallel transactions using goroutines and mutex channel.
- Reduce the size of docker images using multi-stage.
- Configured Nginx for optimized routing and security.
- Developed API documentation using Swagger.
- Migrated messaging system from RabbitMQ to Google Pub/Sub for better scalability and maintainability.
- Used hibernate and gorm to create entities in the postgres database and also to manipulate queries when necessary.
- Used Log4j to create metrics and monitor the application's performance, I also used zap to create logs in golang for the devops team to monitor the deployment steps increasing productivity and up to 20%.

### GT Group - Portugal

Remote

Software Engineer (Contract)

Sep 2023 – Dec 2024

- Temporary Technical Leadership: Led a team of developers on the Radar project by 3 months, ensuring on-time and on-budget deliveries.
- Planning and Management: Conducted daily meetings and activity planning with the Product Owner using Jira.
- Decision Making: Defined key architectural decisions for the Radar project, including database mapping and entity modeling for both GORM, Gin and Hibernate, JPA.
- Code Review: Reviewed code from junior developers via github pull requests to ensure quality and consistency.
- Cross-Department Alignment: Collaborated with various departments and stakeholders to align expectations and deliverables.
- System Architecture: Designed and implemented REST and gRPC services using Go and Java, along with frameworks such as Spring Boot.
- Security and Middleware: Developed authentication middleware and implemented CORS handling using Go and TypeScript; secured frontend routes using Next.js.Token Management:
- Created a token-based authentication system in Go with JWT, including token validation via browser cookies, cache management and rate limiting.
- Used gorm to create entities in the postgres database and also to manipulate queries when necessary.
- Helped define the modeling of postgresql entity relationships using figma and tested with datagrip, created communication with the driver and applied the singleton design pattern.
- AI-Powered Automation: Implemented the Radar system and Gil AI, reducing operational bottlenecks, increasing automation by 25%, and decreasing the need for managerial involvement.

### Exosfera - Argentina

Hybrid

Software Engineer (Freelance)

Jan 2023 – Aug 2023

- Used Keycloak for the creation of realms, configuring multi-factor authentication, password recovery methods, social login, and access level definitions.
- Utilized MinIO for object storage of photos and videos generated by Vue.js-based front-end applications.
- Integrated payment systems with PayPal and Stripe using Spring Boot to handle API requests.
- Implemented payment queues with RabbitMQ and handled order status updates for items in e-commerce shopping carts.
- Achieved maximum possible unit test coverage using Jest on the front end and JUnit on the back end.
- Developed customizable calendar plugins for scheduling and reservation features.
- Used cloud storage (AWS) for hosting systems and e-commerce platforms.
- Created Docker images and stored them in Docker Hub.
- Created a CRM system to manage website editing and maintenance, enabling administrators to manage multiple websites simultaneously.
- Developed RESTful APIs using NestJS with Prisma and documented endpoints with Swagger.
- Maintained and customized WordPress websites by editing templates using PHP 7.
- Enhanced application security through the implementation of Spring Security.
- Applied Lombok to simplify lengthy classes by removing constructors and getter/setter methods, adhering to the SRP (Single Responsibility Principle) and DRY (Don't Repeat Yourself) principles.

<b>Equiplano - Brazil</b>	Remote
Software Engineer (Contract)	Fev 2022 – Dec 2022
<ul style="list-style-type: none"><li>Optimized Docker images by reducing their size, then deployed them to municipal Windows Server environments using Jenkins.</li><li>Used Firebird for querying reports and inserting data into municipal client database tables.</li><li>Developed interfaces and components with Angular and RxJS to manage asynchronous methods and event listeners.</li><li>Applied HTML5 and CSS3, and performed tests using Jest. Utilized UI libraries such as Bootstrap (for the responsive grid system), Nebular, Flexbox, and DevExtreme (prebuilt component suite).</li><li>Created SQL tables manually using OracleDB as the database management system.</li><li>Applied Lombok to reduce boilerplate code in constructors, getters, and setters, resulting in cleaner, more concise code.</li><li>Implemented logging with the SLF4J library, improving team debugging efficiency by 10%.</li><li>Conducted integration testing with Mockito and unit testing with JUnit. Used Selenium on the UI layer to simulate user interactions with the system.</li><li>Extensively used JasperReports for generating and customizing PDF reports in governmental legal processes.</li><li>Maintained legacy systems using Spring Boot and Spring Data for database interaction with PostgreSQL and MySQL through Java objects.</li><li>Applied the Open/Closed Principle by adding new endpoints without affecting existing ones.</li><li>Refactored classes using inheritance and applied the Interface Segregation Principle to ensure clear separation of responsibilities.</li></ul>	

<b>Wlabs.io - Brazil</b>	Remote
Software Engineer (Freelance)	Oct 2019 – Jan 2021
<ul style="list-style-type: none"><li>Creation of endpoints using Next.js, with Swagger documentation applied to the endpoints and tested using Postman and Jest.</li><li>Data modeling using Prisma Schema, including the creation of relationships between tables.</li><li>Implemented image compression logic and integrated AWS S3 into the project, which helped reduce image storage costs and allowed storing three additional photos in place of one.</li><li>Added Google Maps integration for location using latitude and longitude.</li><li>Developed logic to save avatars in base64 format in the database.</li><li>Implemented application caching for frequent queries using Redis.</li><li>Used RabbitMQ queues to enable communication and data transfer between microservices.</li></ul>	

<b>MzTech- Brazil</b>	Remote
Software Engineer (Freelance)	Fev 2016 – Oct 2019
<ul style="list-style-type: none"><li>Modernization of the legacy system from PHP to Java with Spring Boot.</li><li>Used PrimeFaces and Thymeleaf for page creation, based on the identified needs.</li><li>Database corrections and insertion of new information into MySQL using Spring Data.</li><li>The implementation with GlassFish revealed major issues, so Tomcat was adopted instead.</li><li>Used the Singleton pattern for the database connection table to ensure the same instance is always used.</li><li>Applied threads to handle asynchronous method requirements.</li><li>Created Docker images for both the application and the database.</li><li>Performed manual deployment on the server.</li><li>Created Linux scripts for data insertion and application startup.</li><li>Approved, rejected, or created new pull requests on GitHub.</li><li>Added a pre-commit hook to the application and created a .dockerignore file.</li><li>Created new branches for testing, production, and development, with environments set up according to project needs.</li></ul>	

Projects

**Freight-Delay-Notification:** Is an automated solution for monitoring, analyzing, and notifying freight delays using real-time traffic data. The system integrates with external APIs (Google Maps, OpenAI GPT-4, SendGrid) to provide end-to-end monitoring and proactive communication of significant route delays.

**Order-Ms-API:** Is a microservice responsible for order management in a distributed architecture. It consumes order creation events via RabbitMQ, stores data in MongoDB, and exposes REST APIs for querying orders by customer.

**Dafon PDF Extractor Api:** This API processes PDF documents to identify and extract company names, NIFs (Portuguese Tax Identification Numbers), and related data.

**Bank-Transaction-API:** Bank App is a modern digital wallet system built with Spring Boot that provides secure financial transactions between users and merchants. The system implements a microservices architecture with external integrations for authorization and notification services.

Courses and Certifications

Go Basic: HackerRank (Certification)	2025
Devops Bootcamp: Fast Learning Path [all-in-one]: Udemy	2025
Terraform To Aws: Udemy	2025
(Golang): Exploring the Language of Google: Udemy	2024
Azure Cloud: Creating A Server With A Database To Receive An Application: Alura	2023
Azure: Manage Kubernetes With Aks And Acr: Alura	2023
Business Agility: Alura	2023
Infrastructure As Code: Preparing Machines On Aws With Ansible And Terraform: Alura	2023
Threads In Java 2: Advanced Concurrent Programming: Alura	2023
Microservices: Exploring The Concepts: Alura	2023
Spring Boot 3: Apply Best Practices And Secure A Rest Api: Alura	2023
Kubernetes: Deployments, Volumes And Scalability: Alura	2023
Spring Boot 3: Document, Test, And Prepare An Api For Deployment: Alura	2023
Kubernetes: Deployments, Volumes And Scalability: Alura	2023
Scrum Fundamentals Certified: Scrumstudy (Certification)	2019

LANGUAGES

English (Advanced)	Spanish (Advanced)	Portuguese (Native)
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PERSONAL SKILLS

Analytical Thinking | Time Management | Strong Communication | Problem-Solving | Teamwork