General

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About me

I am an experienced professional specializing in software architecture, object-oriented design, and software design patterns. With over 18 years of hands-on experience, I possess a strong leadership background with a passion for creating cutting-edge solutions.

Passionate about writing clean and testable code, which are the defining characteristics of my work.

Background

Certifications

2011	Sun Certified Enterprise Architect
2015	Certified JavaScript Developer
2009	Sun Certified Business Component Developer
2008	Sun Certified Web Components Developer
2008	Sun Certified Java Programmer

Courses and Seminars

2020	Kubernetes - Devoteam k8s course
2017	User Experience for developers and designers – V.Office

2016	BrazilJS conference - braziljs.org
2015	Big Data examples with Apache Spark
2015	AngularJS development - Branas
2014	Apache Cassandra scalable storage – Chaordic Academy
2013	Clean Code Focused in Java - Branas
2006	Java web development - Unisul

Employment overview

Apr/2024 - Present	Software Architect - Freelance	FREELANCE
Jul/2019 - Apr/ 2024	Team Leader	LUXHUB
Oct/2018 - Jul/2019	Senior Software Engineer	Fujitsu Luxembourg
Apr/2008 - Jul/2018	Software Architect / Senior Software Engineer	Softplan
Aug/2006 - Mar/2008	Software Engineer	GSurf

Projects

2023/2024 - Team Leader / Architect - CESOP Reporting tools

In this project, I have served as both Team Leader and Architect, designing the architecture of the solutions and leading the development and integration of various services.

The software includes multiple user interfaces in different contexts, with a reusable core across all solutions, maximizing code reusability. The three primary interfaces are:
- Command Line Interface using Picocli
- Web Interface using VueJS with a Java backend
- REST API

Performance, security, and scalability are the main non-functional requirements of this project.

Utilizing Spring Boot, Kubernetes, and agile methodologies, our team successfully delivers valuable features and improvements in each two-week sprint.

Java, Spring Boot, Spring Security, Redis, Junit, Mockito, VueJS, Docker, K8s, Git, Sonar, Picocli, Swagger, PostgreSQL, Gitlab CI/CD

2022 - Team Leader / Architect - XS2A PSD2 SANDBOX redesign

In this project, I served as Team Leader and Architect, responsible for redesigning an existing solution to cut maintenance costs and improve support, adhering to PSD2 regulations.

Support tickets were piling up due to the time-consuming and complex maintenance process. Each customer had their own instance of the service with specific customizations.
I proposed a brand-new architecture and design for the application, transforming it into a multitenant service using best practices in architecture and coding.

The new version has reduced maintenance needs to nearly zero, cutting costs and enhancing customer support.

Java, Spring Boot, Spring Security, Redis, Junit, Mockito, Docker, K8s, Git, Sonar, Gitlab CI/CD

2021/2022 - Team Leader / Architect - Marketplace for Financial APIs

In this project, I served as Team Leader and Architect, responsible for designing the architecture of a new product version, providing support and guidance to developers, and conducting code reviews.

The previous version, built with outdated technologies, presented significant challenges in maintenance and scalability. I led the initiative to rewrite the project using modern technologies and paradigms, resulting in a scalable and maintainable solution.

The product was restructured into four distinct services, each focused on specific domains. To achieve scalability, we developed stateless services and implemented Redis as a cache manager, allowing different service instances to share caches and user sessions. Additionally, we utilized Camunda BPM for automating tasks, leveraging asynchronous and scalable workers.

Java, Spring Boot, Spring Security, Redis, Camunda BPM, Strapi, Junit, Mockito, VueJS, Docker, K8s, Git, Sonar, Gitlab CI/CD

2020 - Team Leader / Architect - CEDR conversion and validation tool

In this project, I served as Team Leader, providing support and guidance to junior developers.

The CSSF mandated that banking institutions provide data related to IBAN accounts and safe-deposit boxes within a tight deadline. To assist banks in meeting these requirements, we developed a tool to convert and validate data from legacy systems (CSV format) to the JSON format specified by the CSSF. The tool was designed to be reliable and performant, given the large volume of data processed daily.

In addition to data conversion, the tool also handles file signing and encryption according to PGP specifications, fulfilling all CSSF requirements.

Java, Bouncy GPG, PicoCli, Mockito, Junit, Jenkins, Git, Sonar

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2019 - Senior Software engineer - LUXHUB One

In this project, I served as a Senior Software Engineer, responsible for coding the most critical services, implementing unit tests, and creating mocks to simulate bank services.

Given that PSD2 APIs from banks lack standardization, each bank's implementation varies, making integration challenging for Third Party Providers (TPPs) who must manage multiple implementations and integration tests. To address this, I contributed to the development of LUXHUB One, which offers a standardized API, enabling TPPs to integrate seamlessly with any PSD2 API supported by the product.

Java, Spring Boot, Spring Cloud Gateway, Wiremock, Mockito, Junit, Docker, K8s, Jenkins, Git, Sonar

Nov-2018 - Senior Software engineer - XS2A PSD2 compliance API

This project is a key initiative resulting from the PSD2 directive introduced by the European Banking Authority, which enables bank customers to use third-party providers for financial management.

Since joining the company, I have implemented over 30 Jenkins pipelines to automate continuous deployment, run unit and end-to-end tests, manage environment setups and updates, and generate daily reports. Additionally, I wrote performance tests using Gatling and analyzed the results, contributing to the development of a faster and more stable product.

Java, Groovy, Spring Boot, MySQL, Gatling.io, Swagger, SoapUI, Axway API Gateway, Jenkins, Git, Sonar

Feb-2018 - Software Architect - Brazilian Government – Smart cities

I designed and developed a multi-tenant platform aimed at enhancing interactions between the Brazilian government and its citizens. The application provides users with access to issues via both smartphones and web browsers, while keeping them informed about resolution progress.

The project prioritizes high performance and scalability to accommodate an increasing number of active users over time.

Java, Spring Boot, Eureka, Elasticsearch, Kibana, Undertow, Docker, jUnit, MongoDB, Git, Rancher

Oct-2017 - Software Architect - React component - Rendering dynamic forms

I developed reusable React components to dynamically render forms based on the JSON Schema specification. These components are now utilized across various projects within the company, significantly accelerating the development process.

ReactJS, Ubuntu, Docker, Git

Feb-2017 - Software Architect / Software engineer - Santa Catarina Government – Dashboard Refactoring

I led the refactoring of a dashboard application designed for government employees to monitor recent events, such as new citizen requests and expired contracts. As the user base grew, the dashboard experienced performance issues.

The main objective was to identify and address performance bottlenecks. I analyzed the application, pinpointed the problematic features, and developed solutions in collaboration with team members. Additionally, I created visual graphs to demonstrate performance improvements post-refactoring.

In this project, which involved a team of three (a database administrator and two software engineers), I:

- Created unit tests to ensure the refactoring did not impact existing features
- Migrated the project to Spring Boot
- Transitioned from jBoss EAP 6.3 to Undertow
- Implemented caching strategies where applicable
- Utilized a shared memory NoSQL database for caches and sessions
- Redesigned the architecture to support load balancing

ReactJS, Ubuntu, Docker, Git

Sept-2016 - Software engineer - Inner Source Components documentation

I developed comprehensive documentation for the components maintained by my team to facilitate code accessibility and usability within the company. The documentation, provided in README.md files, was designed to enable developers to easily clone the project, run it locally, and make modifications.

To ensure clarity, I updated the documentation based on feedback and common issues encountered by developers.

Key contributions to this project include:

- Created detailed README files for each component
- Tested the documentation by following the outlined steps
- Collaborated with colleagues to validate and refine the documentation for clarity
- Wrote unit tests to increase code coverage and mitigate potential regressions

Git, Markdown, JUnit

April-2016 - Software engineer - São Bernardo do Campo Town Hall – Security refactoring

I contributed to a security project aimed at replacing an outdated Java Authentication and Authorization Service (JAAS) implementation, which was performing poorly. The project was necessary due to the company's new applications exposing RESTful services, requiring a security framework that ensured high performance.

The objective was to develop a new security infrastructure that would replace the existing implementation while maintaining compatibility with legacy applications. Additionally, I conducted research on best practices for securing REST services.

In this project, which involved a team of two (a software architect and myself), I served as the sole software engineer, responsible for coding the entire project.

Java, Spring Boot, Gatling.io, Ubuntu, Undertow, Docker, jUnit, Eclipse, Git

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June-2015 - Full stack developer - São Paulo Government - Form builder

I contributed to the "Zero Paper" project for the Environmental System of São Paulo, a state government initiative focused on environmental management. This application enables citizens to request environmental authorizations online, replacing a previously paper-based process to reduce paper waste.

The project's primary objective was to eliminate the use of printed forms by automating the request and approval process through a BPM flow, which routes tasks according to a predefined model set by the government.

I developed a form builder tool that allows government users to create and publish custom forms with components such as fields and buttons through a drag-and-drop interface, ensuring ease of use for non-technical users.

The "Zero Paper" project involved over 20 team members across three teams. For this specific application, my team consisted of four members: a web designer, a frontend developer, and two backend developers.

AngularJS, Java, Spring Boot, MongoDB, Gatling.io, Bootstrap, Ubuntu, Undertow, Docker, Eclipse, Webstorm, Bower, Grunt, Git

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Mar-2014 - Senior Software Engineer - Paraná Streets Department

I worked on the "Legal Process System" project for the Streets Department of the Paraná District in Brazil. This web application converts administrative proceedings into legal processes.

The system integrates with existing traffic ticket management software via REST services to load administrative proceeding data and generate legal processes when tickets remain unpaid. The application also supports digital signing to formalize the process.

In my role as team leader, I guided a team of new employees and studied JavaServer Faces to meet client requirements. Additionally, I performed code reviews and served as Scrum Master, overseeing the project's development and ensuring effective team collaboration.

JSF, Java, Apache Solr, Windows, Oracle database, Eclipse

June-2008 - Software Engineer - Brazilian government's – Administrative proceedings

I contributed to an Administrative Proceedings project serving multiple Brazilian states, including Santa Catarina, Paraná, São Paulo, Ceará, and Alagoas. This application manages administrative proceedings by enabling the creation, transfer, and management of cases, generating and digitally signing PDFs, converting and merging documents, and performing full-text searches.

The application also provided extensive customization options for different clients, including labels, document headers and footers, themes, and additional features.

The project involved a team of over 15 members.

Java, Java Server Pages, jQuery, Struts, EJB, Apache Solr, Oracle database, SQL Server database, jBoss, WebSphere, JavaEE, Eclipse

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Aug-2006 - Software Engineer - GSURF Internal Software

I worked on the internal software for GSurf, a company that previously operated as a small Internet provider with manual daily processes. The application I developed automated billing by generating and emailing invoices to clients. It also included functionality to automatically suspend Internet access for clients who did not make payments, using payment confirmation data provided by a bank integration via file.

Additionally, I created web services to facilitate integration between the website and the internal application. This allowed the website to communicate with the system to suspend service and cease generating invoices when a user canceled their subscription.

The project team consisted of four members.

PHP, HTML, CSS, JavaScript, MySQL