

# Fernando Romulo da Silva

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| Software Engineer | Full-stack | Java | Jakarta EE | Spring Frameworks | SQL | NoSQL | Docker | Kubernetes |  
| JavaScript | TypeScript | React |

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**Work Model Portugal:** Remote or Hybrid (max twice per month)

**Relocation:** Canada, EUA, Ireland, Australia and UK (remote, hybrid and onsite)

## PROFILE SUMMARY

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I am a senior full-stack certified software engineer, highly motivated by Java platform and JavaScript technologies. Although my primary qualifications are Java back-end, front-end server-side, and SQL databases, I have also worked with JavaScript front-end and NoSQL databases. I majored in computer science, have a postgraduate specialization in software engineering, and have some I.T. certifications.

I have experience in analysis, design, coding, testing (automated and manual), and delivering applications like REST and SOAP web services, console applications, libraries, web applications, batch jobs, web crawlers, and desktop applications.

During my more than 15 years of experience, I have worked in a few business sectors like ERP, content management systems, employee benefits solutions, insurance provider solutions, credit reporting agencies (credit bureau), and financial solutions.

## EXPERIENCE

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- **Natixis** – Porto, Portugal (*contract through Aubay Portugal*)

**Senior Full-stack Java and JavaScript Software Engineer** – 04/2022 to 12/2023

I develop and maintain cloud-native financial applications (marketplace and data lake applications) using Java, Spring Boot, RabbitMQ, GCP, JavaScript, Typescript, React, MongoDB, Gitlab, and MySQL.

**Achievements:** Sustainably troubleshooted and resolved complex technical problems using trouble-solving techniques and automated tests on the back-end.

**Activities:**

- Conduct and participate actively in Scrum meetings.
- Presenting demonstrations for users and other developers.
- Fix and update front-end applications.
- Fix and develop new features back-end (Rest API and Messaging) and docs OpenAPI (Swagger).
- Create automated tests and test other developers' tasks.
- Code review on merge request.

- **Boa Vista SCPC** – Barueri SP, Brazil (*first as a contract through Mooven, later as a permanent employee*)

**Senior Back-end Java Software Engineer** – 12/2019 to 03/2022

I developed cloud-native credit bureau applications (debt checking, renegotiating debts, and credit score provider) using Spring Boot, Docker, Kubernetes, GCP, Google Pub/Sub, Redis, Gitlab, PostgreSQL, and MySQL.

**Achievements:** Improved successfully Java applications by leveraging innovative Docker and Spring technologies to enhance performance and reliability.

**Activities:**

- Participate actively in Kanban meetings.
- Create and improve Docker and Kubernetes applications on the GCP cloud.
- Fix and create new features back-end (Rest API, Messaging, and batch) and docs OpenAPI (Swagger).
- Create automated tests.
- Adapt and enhance code to Sonar measurements.
- Create application documentation.
- Run, fix and update deploy pipelines (CI/CD).

- **Fleetcor VB Serviços** – São Paulo SP, Brazil

**Senior Back-end Java Software Engineer** – 04/2015 to 12/2019

I developed web crawlers and employee benefits solutions using Java, JSoup, Apache HttpClient, HtmlUnit, Spring, JAX-WS, JAX-RS, Wildfly, Jetty, Tomcat, and Oracle Database Server.

**Achievements:** Utilized multi-thread executions to accomplish high-performance batch processing, saving time on processing.

**Activities:**

- Create and update Web crawler applications with multi-thread processing.
- Fix and develop new features back-end (Rest API, SOAP, Messaging, Async, and batch).

- Training junior developers.
  - Adapt JEE applications to a private cloud computing.
- **BNP Paribas Cardif** – São Paulo SP, Brazil (contract through PSM Company)
    - Mid Level Back-end Java Developer** – 06/2014 to 04/2015
    - I developed and maintained Java applications for insurance providers, utilizing Java, Spring, Web Services SOAP using Apache CXF, Tomcat, Jetty, and SQL Server.
    - Achievements:** Revamped applications developed on Java web (JSP, Servlet, Taglib, etc.), to Spring frameworks for improved efficiency and functionality.
    - Activities:**
      - Create and update SQL Server queries and procedures.
      - Fix and develop new features back-end (SOAP WS).
      - Training users and product owners.
      - Integrate software components and third-party programs with applications.
  - **Career Break And Freelancer** – São Paulo SP, Brazil
    - Mid Level Back-end Java Developer** – 01/2014 to 06/2014
    - I spent six months working occasionally as an external consultant. I developed and maintained Java applications for diverse companies using the outsourcing platform Freelancer.
    - Achievements:** Updated legacy JEE applications (J2EE) to, by the time, modern Java EE 7 applications, removing unnecessary layers and using automated tests as far as possible, resulting in more efficient back-end applications.
    - Activities:**
      - Configure JEE servers.
      - Update back-end code and configurations.
      - Create project documentation.
  - **VB Serviços** – São Paulo, SP – Brazil
    - Junior/Mid Level Full-stack Java Developer** – 09/2009 to 12/2013
    - As a Java Developer, I worked extensively with employee benefits software solutions utilizing Java Enterprise Edition (JSF, EJB, CDI, JSP, Servlet, JMS, JAX-WS, and JAX-RS), Oracle Database Server, and Wildfly servers.
    - Achievements:** Developed reusable components in order to avoid repeated code, fix common errors, and significantly accelerate the development process.
    - Activities:**
      - Create and update JSF pages.
      - Fix and develop new features back-end (EJB, SOAP WS, and JMS).
      - Create scripts for deploying applications.
      - Recommend and execute improvements.
      - Run, fix and update bash/shell scripts to deploy applications.
  - **Vetor Web** – São Paulo, SP – Brazil
    - Junior Full-stack Java and JavaScript Developer** – 04/2008 to 08/2009
    - I developed innovative interfaces for content management systems with advanced features using JavaScript, Java, JQuery, JSP, JSF, Spring, Tomcat, and MySQL.
    - Achievements:** Implemented a new front-end system, which resulted in advanced user interfaces and reliable back-ends.
    - Activities:**
      - Improving pages JSP with JavaScript and JQuery framework.
      - Maintain up-to-date documentation about business and technical guides.
      - Deploy applications (back-end and front-end) on web containers.
  - **DB1** – Maringá, Paraná – Brazil
    - Junior Full-stack Delphi and PL/SQL Developer** – 04/2007 to 04/2008
    - I was a Delphi and Oracle PL/SQL developer working on various ERP projects with focus on desktop and procedures, functions and triggers.
    - Achievements:** Extensive experience creating, testing and maintaining applications for medium to large wholesale companies.
    - Activities:**
      - Create and update Oracle DB procedures, functions, and triggers.
      - Testing and evaluating new Delphi forms.
      - Configure applications on computer clients.

## SKILLS

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- **Languages**

- ◆ **English:** Advanced English speaker.
- ◆ **Portuguese:** Native Portuguese speaker.

- **Java**

- ◆ **Versions:** JDK 5 until JDK 21, GraalVm, DCEVM and HotSwapAgent.
- ◆ **Libraries:** JUnit, TestNG, AssertJ, Mockito, HtmlUnit, Wiremock, JSoup, ApacheUtils, OpenAPI, OpenFeign, QueryDSL, Guava, etc.
- ◆ **Tools:** Ant, Maven, Gradle, Spotbugs, PMD, and Checkstyle.
- ◆ **Servers:** Wildfly, Glassfish, Tomcat, Undertow, and Jetty.
- ◆ **Frameworks**
  - **Spring:** Core, Transaction, Boot, Security, Data, Batch and MVC.
  - **Jakarta EE:** JSF, EJB, JTA, JPA, CDI, JAX-WS, JAX-RS, JMS, Batch Processing, Beans validation, etc.
  - **Quarkus:** Panache, QuarkusTest, native image, etc.
  - **Others:** Hibernate ORM, Hibernate Search, Hibernate Validator, and Swing.

- **JavaScript**

- ◆ **Version:** JavaScript ES6 and Typescript.
- ◆ **Libraries:** React, React Router, Redux, Tanstack Query, Lodash, Axios, Jest and JQuery.
- ◆ **Tools:** JSLint, Npm, Yarn, and WebPack.

- **Data Bases**

- ◆ **SQL:** Oracle, PostgreSQL, SQL Server and MySQL.
- ◆ **PL/SQL:** Oracle and SQL Server.
- ◆ **NoSQL:** MongoDB and Redis.

- **Infrastructure**

- ◆ **Virtualization:** Virtual Box, Docker, Docker Compose, and Kubernetes.
- ◆ **Messaging:** RabbitMQ, JMS (Jakarta EE provider and ActiveMQ Artemis), and Google Pub/Sub.
- ◆ **Operation Systems:** Windows desktop (all flavors) and Ubuntu Linux.
- ◆ **Cloud Computing:** Google Cloud Platform (GCP), Rancher (private cloud).

- **Tools**

- ◆ **Version Control:** Git, Github, Bitbucket and Gitlab.
- ◆ **IDES:** Eclipse, Visual Studio Code, Dbeaver, and MongoDB Compass.
- ◆ **Scripts:** Batchfile and Shell.

- **Project Management**

- ◆ **Frameworks:** Scrum (daily, task breakdown, grooming, planning, and retro), Kanban (daily, replenishment).
- ◆ **Software:** Jira, Kanbanize, Microsoft Team Foundation and Redmine.

- **Software Development**

- ◆ **Principles:** SOLID, Design Patterns, Object Oriented Design, Domain Driven Design, UML and TDD.
- ◆ **Architecture:** Event-driven architecture, Hexagonal architecture, Microservices, Monolith, and CQRS.

## EDUCATION

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- **Postgraduate Degree – Software Engineering Specialization, 03/2018 – 12/2020**

Pontifícia Universidade Católica de São Paulo

Specialization course with emphasis on software development and engineering using new technologies.

- **Technical Course – W1 Advanced Web Interface Development, 02/2014 to 03/2014**

Global Code – São Paulo, SP – Brazil

Coursework to learn web technologies like HTML5, XPath, JPath, Javascript, and JQuery.

- **Technical Course – Java Web Development, 06/2009 to 09/2009**

Caelum – São Paulo, SP – Brazil

Coursework for learning Java Web technologies, JSP, Servlet, Struts, and JSF.

- **Bachelor of Science – Computer Science**, 03/2002 to 12/2006  
UNOESTE – Presidente Prudente – SP Brazil  
Computer science major with emphasis on math, computer system knowledge, programming, developing computer tools, and software design.

## CERTIFICATIONS

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- Oracle Java EE 7 Application Developer
- Oracle Java SE 8 Programmer
- Oracle Certified Master, Java SE 6 Developer
- Sun Certified Java Programmer 5

## RECENT PROJECTS

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**Company:** Natixis

**Project :** Frontend Data Lake (New features)

**Stack:** TypeScript, React 18, Axios, Jest, Yarn, ESLint

**Role:** Senior Software Engineer

**Description:** This a front-end application for the next project described. On this application, I fixed and updated React JS pages.

- Steps:**
- Updated functions and layouts
  - Update/create configs files

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**Company:** Natixis

**Project :** API for Data Lake (New features)

**Stack:** Java 17, Spring Boot 3.0, JUnit, AssertJ, MongoDB, RabbitMQ, Docker, Kubernetes and GCP

**Role:** Senior Software Engineer

**Description:** This API create scheduled reports that read data from a big data structure expose its results on temporary databases. I intensively used automated tests to guarantee the quality of its development.

- Steps:**
- Create domains classes and tests
  - Update/create services classes and tests
  - Update/create endpoint classes and tests
  - Update/create OpenAPI (Swagger) documentation

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**Company:** Boa Vista SCPC

**Project :** API for Layouts (New Project)

**Stack:** Java 11, Spring Boot 2.5, Spring Security, JUnit, AssertJ, MySQL, Docker, Kubernetes and GCP

**Role:** Senior Software Engineer

**Description:** This API provides file layouts on JSON and XML formats to be used on batch processing on GCP. Due to layouts having to follow strict rules, the application has to validate a lot of situations; I used automated tests like unit (TDD), integration, and acceptance tests (Spring Mock MVC) to solve this problem.

- Steps:**
- Create domains classes and tests
  - Create services classes and tests
  - Create endpoint classes and tests
  - Create OpenAPI (Swagger) documentation and project documentation files (readme.md)
  - Create Dockerfile
  - Create Kubernetes yml files (service, configMap, deployment, kustomization)

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**Company:** Boa Vista SCPC

**Project:** Batch Processing For Debts (New Project)

**Stack:** Java 11, Spring Boot 2.5, Spring Batch, JUnit, AssertJ, PostgreSQL, Redis, Docker, Kubernetes and GCP

**Role:** Senior Software Engineer

**Description:** This batch application reads specific files, treats them, retrieving data from other microservices, and stores the data (credit score) on a Redis Hashes. The business rules were simple, but some analysis had to be done.

- Steps:**
- Create domains classes and tests
  - Create services classes and tests
  - Create batch classes and tests
  - Create project documentation files (readme.md)
  - Create Dockerfile
  - Create Kubernetes yml files (service, cron job, kustomization)

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**Company:** Fleetcor VB Serviços

**Project:** Benefits buyer (Maintenance and Refactor)

**Stack:** Java 11, Wildfly, JEE, Spring Boot, OracleSQL, Docker

**Role:** Senior Software Engineer

**Description:** Refactoring was done by splitting some specific modules (navigation) and transforming a monolithic architecture application towards micro-service architecture using multi-thread batch processing.

- Steps:**
- Update/create domains classes
  - Update/create services classes
  - Create/create documetation classes

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**Company:** Fleetcor VB Serviços

**Project:** Job Scheduler (New Project)

**Stack:** Java 11, JMS, Spring Boot, MySQL, Docker

**Role:** Senior Software Engineer

**Description:** This application is a job executor for other applications, listening requests from Rest API, SOAP, and JMS. A server-side front-end (JSF pages) was developed to create executions too.

- Steps:**
- Create domains classes
  - Create services classes
  - Create endpoint classes
  - Create JMS client
  - Create Dockerfile