

# WILLIAM NIEMIEC

PMP, SENIOR FULL-STACK DEVELOPER, AND PH.D. STUDENT

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William Niemiec has 5 years of experience as a full-stack developer and is a Ph.D student at the Institute of Informatics of the Federal University of Rio Grande do Sul (UFRGS) since 2024. He also works as a senior systems developer at Paytrack in Brazil. He has managed several projects, as well as developed various systems, including back-end, front-end, and mobile applications. In parallel, he has been researching software engineering in healthcare since 2021, attending health conferences, and organizing workshops with healthcare professionals. His studies include interoperability protocols such as HL7 and FHIR. He also has research interests in Software Engineering, Component-Based Software Engineering, Model-Driven Development, and Artificial Intelligence applied in healthcare.

## HARD SKILLS

- Language and frameworks:** Java, Python, PHP, Laravel, C#, JavaScript, Angular, React, React Native, Django, Spring Boot, Node.js, Express.js, AdonisJS, Selenium;
- OS & platforms:** Linux, Windows, GCP, AWS, Docker, Kubernetes, Azure Service Bus;
- DBMS:** Postgres, OracleDB, MongoDB, SQL;
- SCM, build, CI/CD:** Git, GitHub Actions;
- Observability:** Sentry, Kibana, Grafana
- Other:** JUnit, Nginx, Apache, SonarQube, Agentic-LLMs (CursorAI and Copilot).

## SOFT SKILLS

- Good communication
- Willingness to acquire new knowledge
- Persistence in solving problems
- Flexibility and fast adaptation

## EDUCATION

### Ph.D. in Computer Science

Federal University of Rio Grande do Sul

2024 - Present

### Bachelor of Computer Science

Federal University of Rio Grande do Sul

Aug 2018 - Oct 2022

## LANGUAGES

- English:** Advanced
- Spanish:** Intermediate
- Portuguese:** Fluent

## EXPERIENCE

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### Paytrack, Senior Systems Developer

Nov 2025 – Present

Paytrack is responsible for building and evolving solutions that connect the entire corporate travel process, from the request to the reimbursement, covering bookings, policies, payments, integrations with suppliers, financial back office, and systems used by Paytrack Agency and partner agencies, ensuring efficiency and a fully integrated experience among clients, suppliers, and operations.

#### Activities and responsibilities:

- Develop and enhance critical functionalities for the financial and operational management platform, focusing on user experience, compliance, and high operational efficiency.
- Actively participate in hands-on development using Java 17 (Spring Boot, Quarkus) for scalable backend APIs and React/AngularJS for frontend solutions.
- Create and maintain clean, testable, and easily maintainable code.
- Collaborate with the team on all phases, from ideation to delivery and post-delivery support, leveraging agile methodologies and constantly seeking system improvements.
- Perform code reviews and provide constructive feedback to ensure high technical quality and system integrity.

**Technologies:** Java 17, Spring Boot, Spring Data, Spring Security, Quarkus, React, AngularJS, Flutter, AWS, PostgreSQL, MySQL, RESTful API, Docker, AI, Kibana, Grafana

### Cognitiva Brasil, Full-stack Developer & PMP

Nov 2022 – Nov 2025

Cognitiva Brasil is a software development company focused on building intelligent, data-driven digital solutions. Cognitiva specializes in full-stack web and mobile application development, offering services in system architecture, AI integration, and enterprise software engineering for clients across diverse industries.

#### Activities and responsibilities:

- Lead several development teams
- Actively participate in hands-on development of APIs (Java, Python, PHP) and front-end solutions (Angular, React, React Native)
- Manage infrastructure (CI/CD, Apache, Nginx)
- Lead client meetings to ensure project alignment and success

**Technologies:** Java 21, Spring Boot, Spring Data, Spring Security, Python, PHP, Angular, React, React Native, CI/CD, Apache, Nginx, Docker, RESTful API

### Federal University of Rio Grande do Sul, Teaching Practice

Oct 2024 – Jun 2025

Federal University of Rio Grande do Sul is one of Brazil's leading research universities, known for excellence in computer science and engineering. William contributed here as a research assistant and teaching practitioner, working on software engineering research, no-code health platforms, and academic instruction.

#### Activities and responsibilities:

- Mentored over 50 undergraduate students in computer science, guiding academic projects and assignments.
- Prepared and delivered lectures on software testing and quality assurance, explaining complex concepts to a diverse audience.
- Assisted in grading assignments and exams, offering constructive feedback to help students improve their understanding.

**Technologies:** Java, JUnit, C, Moodle

## EVE, Full-stack Developer

May 2023 – Nov 2023

EVE is a technology startup dedicated to developing innovative event management platforms. EVE provides scalable tools for organizing, hosting, and managing conferences, workshops, and networking events through user-friendly, high-performance digital solutions.

### Activities and responsibilities:

- Architected and developed a comprehensive event management platform featuring two distinct front-end applications and a centralized backend.
- Engineered a real-time chat system to facilitate attendee networking and communication.
- Implemented a user matching algorithm to connect participants based on shared professional interests.
- Integrated the Split payment API for secure and reliable ticket transactions.

**Technologies:** React, AdonisJS, MySQL, Stripe, TypeScript, Websocket, Microservices

## AVIWA, Full-stack Developer

Mar 2023 – Nov 2023

AVIWA is a creative technology company that builds digital marketplaces and platforms to empower artists and creators. AVIWA's products connect talent with global audiences, offering secure payment systems, portfolio management, and e-commerce functionalities.

### Activities and responsibilities:

- Contributed to the development of a marketplace for artists to sell their creations
- Developed several features, including file uploads, email service, among others
- Engineered and integrated a secure payment gateway to handle transactions for art sales.

**Technologies:** HTML, CSS, JavaScript, Stripe, NodeJS, MongoDB

## Federal University of Rio Grande do Sul, Undergraduate Research Assistant Feb 2020 – Oct 2022

Federal University of Rio Grande do Sul is one of Brazil's leading research universities, known for excellence in computer science and engineering. William contributed here as a research assistant and teaching practitioner, working on software engineering research, no-code health platforms, and academic instruction.

### Activities and responsibilities:

- Led full-stack development on a no-code health platform using Java Spring Boot for the backend architecture.
- Designed and implemented the relational database schema using PostgreSQL.
- Developed and executed unit tests with JUnit to improve test coverage and ensure application reliability.
- Developed a dynamic and responsive user interface for the no-code platform using React with TypeScript, enabling users to create custom health applications through a drag-and-drop interface, and built a cross-platform mobile application using React Native to provide users with on-the-go access to the health platform's features and data, and a backend with Node JS.

**Technologies:** Java Spring Boot, Java 8, JUnit, Postgres, HTML5, CSS3, JavaScript, Typescript, React, React Native, MongoDB, Node JS

## CERTIFICATIONS

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### NestJS: The Complete Developer's Guide

Udemy | 2026

### Microfrontends with React: A Complete Developer's Guide

Udemy | 2025

### Microservices with Node JS and React

Udemy | 2025

### Docker and Kubernetes: The Complete Guide

Udemy | 2025

### Google Cloud Computing Foundations ACADEMY

Google | 2022

**React JS**  
B7Web | 2021

**React Native**  
B7Web | 2021

**Agile Development with Advanced Java**  
Coursera | 2021

**Spring Boot, Hibernate, Rest, Ionic, JWT, S3, MySql, MongoDB**  
Udemy | 2021

**C# Object-Oriented Programming + Projects**  
Udemy | 2021

**Machine Learning and Data Science with Python from A to Z**  
Udemy | 2020

**Object-oriented with Java**  
Coursera | 2020

**Object-oriented with PHP**  
B7Web | 2020

**Bootstrap**  
B7Web | 2020

**HTML5, CSS3, and JavaScript**  
B7Web | 2020

## HONORS - AWARDS

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**International Young Scientist Awards** 2025

Issued by ScienteFather

**Young Researcher Award** 2022

Issued by Federal University of Rio Grande do Sul