

# Brayan Bernardo

SOFTWARE ENGINEER

I'm a curious software engineer with a background in **Machine Learning Research**, **Full Stack Web Development**, and **Quality Assurance**. My career has been a diverse adventure, contributing to impactful projects in the tech industry, academia, and social movements.

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## EXPERIENCE

### H.IAAC, Campinas — Research Associate

APR 2023 - PRESENT

My research focuses on Machine Learning and Generative AI, specifically exploring the synthesis of realistic and expressive virtual avatars driven by speech and text inputs. I utilize advanced technologies and neural network architectures, including Python, PyTorch, Docker, Generative Adversarial Networks (GANs), Variational Autoencoders (VAEs), and Large Language Models (LLMs). See [brbernardo90.github.io/bpsdth](https://brbernardo90.github.io/bpsdth).

### Caena, Campinas — Full Stack Developer

JUN 2017 - APR 2023

I specialize in implementing backend applications using Ruby on Rails, RESTful API patterns, and PostgreSQL, and in creating dynamic user interfaces with Vue.js and Vuex. Both backend and frontend developments adhere to Test-Driven Development (TDD) practices, with system tests developed using Cucumber and Capybara (BDD). My project management approach incorporates Scrum methodologies and the use of Jira software. Additionally, I conduct weekly training sessions for end-users, actively gathering their feedback to improve the application's functionality and overall user experience continuously.

### Diebold Nixdorf, Indaiatuba — Quality Assurance Engineer

MAY 2016 - JUN 2017

Planning and development of automated tests for web and mobile platforms (Android and iOS) using BDD methodology with tools such as Appium, Ruby (Capybara), and Cucumber. For desktop software testing, with BDD methodology using Python, Selenium, and Behave. Tests include AWS SQS and Lambda. Projects with Scrum methodology supported by JIRA.

### Sofist, Campinas — Software Test Engineer

NOV 2014 - MAR 2016

My responsibilities included automating test cases with Java, Cucumber, and using databases like Cassandra and SQL Server. I handled tests across unit, integration, and system levels, applying various testing techniques such as white-box, black-box, and regression testing. Additionally, I conducted training workshops on unit testing for developers, helping improve testing practices within the team.

## EDUCATION

### University of Campinas (UNICAMP)

Master of Science in Computer Engineering, Specialization in Artificial Intelligence  
MAR 2022 - MAY 2024, CAMPINAS, SP

### Federal University of São Carlos (UFSCAR)

Bachelor of Computer Science  
JUN 2017 - APR 2023, SÃO CARLOS, SP

## SKILLS

### Machine Learning

PyTorch, Generative IA, LLM/Transformer, GAN, VAE and Docker.

### Full Stack

Ruby on Rails (Ruby), Rspec, Pundit, Vue.js (Javascript), HTML, CSS, Mocha, Chai, TDD and PostgreSQL.

### Full Stack

Web Development / Ruby on Rails (Ruby), Rspec, Pundit, Vue.js (Javascript), HTML, CSS, Mocha, Chai, TDD and PostgreSQL.

### Quality Assurance

Test automation, Cucumber, BDD, Capybara (Ruby), Selenium, Appium, Behave (Python) and Java.

## LANGUAGES

Portuguese (Native)

English (Advanced)

Spanish (Intermediate)