

Bruno Sousa

SOFTWARE ENGINEER

Porto, Portugal

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Experience

PlatformE

Porto, Portugal

SOFTWARE ENGINEER

Sep. 2023 - Jan. 2025

- Part of the team that built a platform for fashion brands and manufacturers to collaborate in the process of developing new apparel.
- Used past experience and expertise to set guidelines for the development process, as well as provide support for newcomers' onboarding into the team.
- Heavy focus on performance, particularly regarding database queries, to support interacting with billions of records in the database. Optimized list & search of those records, to make it possible for users to search, filter, and list all variants of their designs.
- Sole responsibility of developing an SDK that would allow customers to showcase designs on their webpage, supporting functionality for end users to customize and personalize the designs before ordering.
- **Tech Stack:** Python, Django, PostgreSQL, Redis, JavaScript, HTMX, TailwindCSS, TypeScript, Three.js, Puppeteer, Sentry

Teya

Porto, Portugal

SOFTWARE ENGINEER

Mar. 2022 - Aug. 2023

- Member of the team responsible for maintaining and evolving the transaction gateway inside the acquirer company. This required gaining in-depth knowledge of both the product and the tech stack, from infrastructure, backend, and frontend.
- One of the points of contact with the customer support team, focusing on debugging problems and ensuring platform stability. Led improvements in observability, in order to reduce support needs and to notice issues as soon as possible.
- Responsible for scaling the platform in response to a 4x increase in transaction volume. This required optimizations in code and SQL queries, and provisioning of new virtual machines.
- Helped other teams migrate into the new company's infrastructure and tech stack, as well as helped teams from the new company integrate with the transaction gateway.
- Lead the development effort of a new process of onboarding customers into the transaction gateway, to be in line (and integrated with) the onboarding process of the new company. This required architecting the solution based on requirements from multiple teams, aligning with several stakeholders, resulting in a sub-10 seconds onboarding experience.
- Selected to be part of a new team responsible for the implementation of a new transaction gateway - which could handle 1000+ transactions/second with a sub 1s p90. Helped with the initial definition of architecture and implementation of a prototype.
- **Tech Stack:** Python, Django, PostgreSQL, Elasticsearch, MongoDB, AWS, RabbitMQ, Kafka, Flask, JavaScript, AngularJS, Kibana, Grafana, Loki, Prometheus, Java

Switch (Acquired by Teya)

Porto, Portugal

JUNIOR SOFTWARE ENGINEER

Sep. 2021 - Feb. 2022

- Developed transaction processing integrations with multiple payment providers, using different communication protocols (REST, SFTP, SOAP, ISO 8583), ensuring transaction reliability and performance.
- Improved the integration abstraction, focusing on speeding up the integration process with new payment providers.
- Implemented multiple features across different microservices, using REST APIs and events for interservice communication, as well as features for client-facing dashboard.
- **Tech Stack:** Python, Django, PostgreSQL, Elasticsearch, MongoDB, RabbitMQ, Flask, JavaScript, AngularJS

Faculdade de Engenharia da Universidade do Porto

Porto, Portugal

TEACHER ASSISTANT - COMPILERS

Mar. 2020 - Jun. 2020

- Compilers is a curricular unit in the 3rd year of the Master in Informatics and Computing Engineering, where the students have the opportunity to learn about the different stages of a compiler and build a compiler for a subset of the Java programming language in Java.
- Helped the professor in the practical classes, by clarifying students' doubts, helping them with course topics as well as software development in general. Assisted the students in building a project which included the different compiling phases.
- Collaborated with the professors and other teaching assistants to create a framework to automatically test the student's compilers features. Created some of the final tests.

Faculdade de Engenharia da Universidade do Porto

Porto, Portugal

TEACHER ASSISTANT - COMPUTER LAB

Oct. 2019 - Dec. 2019

- Computer Lab is a curricular unit in the 2nd year of the Master in Informatics and Computing Engineering, where the students have the opportunity to learn how to use the hardware interface of some computer peripherals and develop low-level software (C and x86 Assembly) to interact with such interface.
- Helped the professor in the practical classes, by clarifying students' doubts, helping them with course topics as well as software development in general. Assisted the students in building a project which included libraries (drivers) built by them to interface with the multiple components.

Education

Faculdade de Engenharia da Universidade do Porto

MSC IN INFORMATICS AND COMPUTING ENGINEERING

Final Grade: 17/20. Master thesis in deep reinforcement learning applied to robot soccer.

Porto, Portugal

Sep. 2016 - Oct. 2021

Skills

Programming	Professional: Python, JavaScript, TypeScript, Java	College/Hobby: Rust, C++, C, PHP, x86 Assembly, Scheme
Backend Frameworks	Professional: Django, Flask	College/Hobby: Node.js, Express, Laravel
Database	Professional: PostgreSQL, Elasticsearch, Redis, MongoDB	College/Hobby: SQLite
Frontend Frameworks	Professional: HTMX, Three.js, TailwindCSS, AngularJS	College/Hobby: WebGL, React, Redux, SASS
Other	Professional: AWS, Docker, RabbitMQ, Kafka, Kibana, Grafana, Prometheus	
Languages	Portuguese, English	

Projects

zerozero.live

TEAM LEADER

Feb. 2020 - Jun. 2020

- Led a team of 8 developers in building an interface for the written reporting of sports matches for zerozero.pt.
- As a team leader I was responsible for communicating with the clients, team organization, and ensuring the application's success.
- As a developer, I was able to setup the application in the clients server, setup all the CI/CD (testing, deploying, ...), setup a reverse proxy to communicate with the clients API, made sure the application was able to work offline, and worked on the game events selection.
- **Tech Stack:** Mostly React, Redux, SASS and HTML5 for the front end, with Node.js for the development. Also PHP for the reserver proxy, cPanel for web hosting and GitLab for version control & CI/CD.

WVAT

TEAM MEMBER

Sep. 2019 - Dec. 2019

- Was a member of a team of 7 developers with a goal to build CLI tool to analyze a domain, its subdomains and respective pages, extracting the used technologies to find their vulnerabilities in order to cross-reference them with known exploits.
- As a developer, I was responsible for the extraction of technologies from a given webpage and for the whole application's automated acceptance tests.
- **Tech Stack:** Node.js