

# Alexandre Castro

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## SUMMARY

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Backend Engineer with 9 years of experience in high-growth SaaS environments. I currently build the infrastructure behind an Agentic RAG system at Caliber, including the data ingestion tools that feed it. Before that, I led the technical evolution of a public API at Neurons that scaled from €250K to over €1M in ARR. With a 7-year foundation in QA automation and SDET roles, I build well-documented systems meant to grow without falling over. I've been the first hire in technical teams more than once, and I work in Python (Django/FastAPI), TypeScript, and DevOps.

## EXPERIENCE

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### Caliber

#### AI & API Engineer

April 2026 – Present

- Build and maintain infrastructure and features for our AI Assistant (Agentic RAG).
- Build data ingestion tools (web scraper, web search API integrations).

*Python, RAG, Vector Databases, Web Scraping, Search API Integrations, LangGraph, AWS, Terraform, Docker, Grafana, PostgreSQL*

### Neurons

#### Backend Engineer

December 2023 – March 2026

- Contributed to the architecture and launch of version 2.0 of the public API, providing the technical foundation to **scale from 7 to 20+ active enterprise clients** and contributing to a **400% increase in ARR (from €250K to €1M+)**.
- **Engineered a self-service API Sandbox environment** and comprehensive **technical documentation**, which reduced the volume of technical support queries from new API users by providing clear implementation recipes and slashed client onboarding time, serving as a primary driver for the Sales team to close high-value accounts.
- Implemented Infrastructure as Code (IaC) using Terraform and Docker to manage deployments on GCP, ensuring high availability and reproducible environments.
- Designed and managed complex data integrations using Airbyte, streamlining data synchronization between internal systems and external partners.

*Python, Django, FastAPI, Pytest, Docker, TypeScript, Terraform, GCP, PostgreSQL, Postman, Serverless, Golang, Airbyte*

#### Software Developer in Test (SDET)

September 2022 – November 2023

- Architected the initial automated testing strategy for both Frontend (TypeScript/Cypress) and Backend (Python/Pytest), ensuring test coverage for critical paths.
- Conducted Load Testing, identifying performance bottlenecks and introduced Contract Testing.

*TypeScript, Cypress, Python, Robot Framework, Contract Testing, GitLab CI, GitHub Actions, Docker, GCP, Postman*

### Startup Development House

#### Test Automation Engineer

April 2022 – August 2022

- Mentored the engineering team on automation tools and best practices.
- Built Cypress suites for OAuth and CAPTCHA flows; added Percy visual regression testing across platforms.

*TypeScript, Cypress, Percy, GitHub Actions*

### Pento

#### QA Engineer

August 2021 – March 2022

- Bootstrapped QA from zero with Cypress and GitHub Actions, owning the E2E and visual/functional quality pipeline (Percy, TestRail).

## EPAM

### QA Engineer

*April 2021 – August 2021*

- Automated testing for a high-traffic E-commerce platform, covering accessibility (A11y) and visual regression with WebdriverIO and AppliTools.

## Productboard

### Quality Engineer

*November 2018 – March 2021*

- Bootstrapped QA as the company's first Quality Engineer, establishing testing standards for a rapidly scaling engineering organisation.
- Built TypeScript/Cypress frameworks integrated into CircleCI and GitLab CI; managed Docker, Kubernetes, and AWS test environments.
- Pioneered Contract Testing for microservices; mentored junior QEs and evangelized quality practices across product teams.

*JavaScript, TypeScript, Cypress, Docker, Kubernetes, CircleCI, GitLab CI, AWS, Terraform, Grafana, JIRA*

## Smartlook

### Software Tester

*November 2017 – October 2018*

- First dedicated tester: built quality processes and the company's first CI automation (Drone CI, Travis CI). Previously Customer Support (Jan–Oct 2017): technical first-line support and knowledge base.

## SELECTED PROJECTS

### töökrratt

[tookratt.com](https://tookratt.com)

Personal RAG job search copilot (FastAPI, Qdrant, Gemini). Ingests listings, answers with citations, and runs evals and observability in production.

### athme

[athmeapp.eu](https://athmeapp.eu)

DevOps for a sports community app: CI/CD, database migrations and backups, a LinkedIn content pipeline, and a move from DigitalOcean to AWS. Recently launched in Valencia.

## TECHNICAL SKILLS

**Languages & Backend:** Python (Django, FastAPI, Pytest), TypeScript (Node.js, Express), SQL (PostgreSQL), NoSQL (MongoDB), Golang, C

**Data & AI:** Pandas, NumPy, Airbyte, Scikit-Learn, Web Scraping, LangGraph, RAG, Vector Databases

**Infrastructure & DevOps:** GCP, AWS, Docker, Kubernetes, GitHub Actions, GitLab CI, CircleCI, Travis CI, Terraform

**Quality & Reliability:** Cypress, Playwright, Selenium WebDriver, Robot Framework, Pytest, Contract Testing, Load Testing, Visual Regression, TDD, Postman, AppliTools, Percy

**Process & Design:** Shape Up, Agile, SCRUM, Kanban, Figma, JIRA, Technical Documentation

## EDUCATION

### M.Sc. in Cognitive Science (Candidate)

*University of Warsaw, 2021–2023*

Coursework in Data Science, Machine Learning, Deep Learning, and Natural Language Processing.

### B.Sc. in Pharmacy

*ESTeSL, Lisbon, 2011–2015*

Foundational degree emphasizing analytical thinking, rigorous methodology, and complex system management.

### Additional Training

Introduction to Backend Development with Node.js - STR Academy, Brno, 2019

**Languages:** English (Professional Fluency) • Portuguese (Native) • Polish (A2) • Spanish (A1)