

Pedro Torres

SOFTWARE ENGINEER · IT TRAINER

Utrecht, Netherlands

📁 portfolio | 📄 pedro-areal-torres | in pedro-areal-torres | ✉️ pedro.ts.torres@gmail.com | ☎️ +351 914 666 034

Work Experience

Tech Lead / Full Stack Developer

Amsterdam, Netherlands

ING BANK

Jul. 2022 – Present

- Developed a graph-based platform using **D3.js**, **Java** and **Neo4j**, powered by an **Apache Airflow** ETL pipeline to extract and centralize data from third-party services and databases, solving data quality issues and enabling observability.
- Turned a zero-user prototype into a stable, company-wide platform by refining the product vision through stakeholder alignment and iterative PoCs.
- Refactored the **Java** backend using a dynamic dispatching pattern, consolidating multiple endpoints into a single parameterized route to improve scalability and maintainability.
- Removed legacy code by migrating from PolymerJS to **React** and **TypeScript**, improving maintainability and developer efficiency.
- Delivered internal training on **React**, **TypeScript** and **Neo4j**, mentoring new team members with documentation and design patterns.

IT Trainer

Remote

RUMOS (ORACLE ACADEMY)

Jan. 2021 – Present

- Delivered instructor-led online training in **Java**, **Python**, **JavaScript**, **TypeScript**, and **MySQL**.
- Created full course content including slide decks, exercises, and evaluation tests, tailoring the curriculum for diverse learner profiles.
- Prepared students for the **Oracle Certified Java SE Developer** certification with a 96% pass rate.
- Instructed over 150 students ranging from 18 to 61 years old, adapting teaching methods to varied learning styles and backgrounds.

Full Stack Developer

Porto, Portugal

PORTUGUESE NATIONAL HEALTH SYSTEM

May 2020 – Jul. 2022

- Developed Trace Covid-19, Portugal's official tracking platform, enabling national-scale case tracing, using **Java**, **JavaScript** and **jQuery**.
- Delivered end-to-end features for the digital medication prescription workflow, now responsible for 92% of prescriptions processed in Portugal.

Software Consultant

Porto, Portugal

DATAMONPLUS

Nov. 2019 – May 2020

- Led requirement analysis and delivered on-site training for enterprise resource planning (ERP) solution tailored to textile manufacturing.
- Delivered software installations to textile companies, ensuring solutions were tailored to stakeholder requirements and business workflows.

Projects

Engitex (SaaS for Textile Industry)

- Developed a modular SaaS solution for textile dyeing and finishing companies using **Next.js**, **NestJS**, **TypeORM**, and **PostgreSQL**.
- Gathered requirements from multiple textile businesses and structured the data model and backend architecture following **Domain-Driven Design (DDD)** principles.
- Designed and built the UI/UX using **TailwindCSS**, creating reusable components, following principles from the book **Refactoring UI**.
- Automated deployments with **Docker** and **Coolify**.
- Secured pilot programs with 3 textile companies (each with 100+ employees and €5M+ annual revenue), and awarded the Portuguese StartUp Voucher for environmental impact and innovation.

Education

Bachelor's Degree in Computer Science and Engineering

Porto, Portugal

FACULTY OF ENGINEERING - POLYTECHNIC OF PORTO

Sep. 2014 – Sep. 2019

Skills

Frontend	Next.js, React, TypeScript, Tailwind CSS
Backend	NestJS, Node.js, Java, Python
Database	PostgreSQL, MySQL, Neo4j
Infra	Docker, Apache Airflow, Ansible, Coolify, Nginx, Azure, Git
Testing	Cypress, Jest
Languages	Portuguese (native), English (fluent), Spanish (fluent), Bulgarian (basic)

Writing

- 2025 Building apps that last: React beyond the syntax
- 2024 Become a software developer: If I could start over ...

[Medium article](#)

[Medium article](#)