

# ORLANDO JOSÉ CUNHA PALMEIRA

## Software Engineer

 18/01/2002  Braga, Portugal  <https://www.linkedin.com/in/orlando-palmeira-725281225/>  <https://github.com/orlandopalmeira>

## EDUCATION

### Master's Degree (MSc), in Software Engineering

#### University of Minho

 September 2023 – Present  Braga, Portugal

- Requirements Engineering;
- Applications Architectures;
- Database administration;
- High-Assurance Interactive Systems;
- Deep learning;
- Ambient Intelligence;
- Agents and Multi-agent Systems;

### Bachelor's Degree (BSc), in Software Engineering

#### University of Minho

 October 2020 – June 2023  Braga, Portugal

- Classification: 15/20

## WORK EXPERIENCE

### Software Engineer (Research Technician)

#### DTx - Digital Transformation Colab

 September 2024 – Present  Braga, Portugal

- **Responsibilities:** Full-stack development and maintenance of the R2UT Project applications, including both backend and frontend features.
- **Tech stack:** Vue.js, C#, .NET 8.0, PostgreSQL

## COMPUTER SKILLS

- Main Development Skills

Python JavaScript Node.js Vue.js Java C#

- Development Tools – Front-End

Vue.js JavaScript HTML5 / PUG CSS

- Development Tools – Back-End

Node.js Java Express Spring Boot Python Flask C#

- Development Tools – Databases

PostgreSQL MySQL MongoDB

- Development Tools – DevOps

Docker Ansible

- Development Tools – IDE

Visual Studio IntelliJ

- Development Tools – General

Git LaTeX C Haskell

## SOFTSKILLS

Learning Potential Responsibility and commitment Team Work  
MultiTasking Motivation Persistence

## LANGUAGES


Portuguese ●●●●●●

English ●●●●●●

## UNIVERSITY PROJECTS


### Application to consult legal rulings

#### Web Engineering

- Description – Web application that allows users to browse and consult judicial rulings published by various Portuguese courts.
- Techs: PUG, Express.js, Passport, Node.js, MongoDB
-  GitHub
- Classification – 20/20.


### Small DNS System

#### Computer Communications

- Description – Designed and implemented a lightweight DNS system in a simulated network environment using the CORE emulator, aiming to replicate domain name resolution processes.
- Techs: Python, Core Emulator
-  GitHub
- Classification – 20/20.


### Database optimization

#### Database administration

- Description – This project focused on performance analysis and optimization of an existing database system. Leveraged advanced techniques in PostgreSQL and PySpark to identify bottlenecks and enhance query efficiency. The testing environment was set up on Google Cloud Platform using virtual machines.
- Techs: PostgreSQL, Apache Spark, Google Cloud
-  GitHub
- Classification – 20/20.


### Web application to carry out voting

#### Applications Architectures & High-assurance Interactive Systems

- Description – Designed and implemented a web-based polling system enabling users to generate, vote in, and review the results of custom polls.
- Techs: Javascript, Vue.js, Java, Springboot, MySQL, Locust
-  GitHub
- Classification – 19/20.


### Laravel.IO Cloud Deployment

#### Cloud Computing Applications and Services

- Description – Implemented infrastructure-as-code using Ansible and Kubernetes (GKE) to automate the deployment of the Laravel.IO application in a cloud environment. Conducted performance and stress testing with Apache JMeter, leveraging Google Cloud monitoring tools for observability and analysis.
- Techs: Google Cloud, Kubernetes (GKE), Ansible, Docker, Apache JMeter
-  GitHub
- Classification – 18.6/20.


## Small CDN for video distribution

### Network Services Engineering

- Description – Designed and implemented a lightweight content delivery network (CDN) for video streaming, leveraging the CORE emulator to simulate a physical infrastructure. An overlay network was built on top to manage and distribute content efficiently to client nodes.
  - Techs: Python, Core Emulator
  -  GitHub
  - Classification – 18.1/20.
- 

## TOML → JSON conversor

### Language Processing

- Description – Implemented a compiler that translates TOML configuration files into JSON format, utilizing the PLY (Python Lex-Yacc) library to define the lexical analyzer and parsing grammar for accurate syntax processing.
  - Techs: Python, PLY (Python Lex-Yacc)
  -  GitHub
  - Classification – 17/20.
- 

Other projects in:  [GitHub](#)