# TIAGO RODRIGUES

## Education

## Faculty of Engineering of the University of Porto

September 2022 - July 2024

Masters in Informatics and Computer Engineering

# University of Twente

ERASMUS+ Programme

September 2023 - February 2024

## Faculty of Engineering of the University of Porto

September 2019 - July 2022

Bachelors in Informatics and Computer Engineering

# Work Experience

INESCTEC February 2024 - Present

Research Assistant

Porto, Portugal

- Investigated discharge summary generation from notes written in the course of hospital admissions using state-of-the-art LLMs, resulting in 85.09% BERTScore similarity with original documents
- Authored a Systematic Literature Review titled "Harnessing Large Language Models for Clinical Information Extraction: A Systematic Literature Review", submitted to the ACM Transaction on Computing for Healthcare
- Tech Stack: Python, Pytorch, Huggingface
- Source Code

## Websystems

November 2021 - January 2022

Full-Stack Developer Intern

Barcelos, Portugal

- Enhanced existing admin dashboard by adding 5 new resource managers with full CRUD capabilities, designing the database from scratch
- Built UI to easily retrieve key information on over 20 clients and respective resources
- Tech Stack: C# with .NET Framework, Microsoft SQL Server, HTML, jQuery, Bootstrap

## **Projects**

## Massive Dataset Challenge

- Developed a Text Classification model for the MASSIVE multilingual dataset using Pytorch and HuggingFace
- Achieved 80.3% Accuracy with results comparable to the original publication (85.1%) with only 2 epochs of fine-tuning
- Tech Stack: Pytorch, Huggingface, Scikit Learn
- Source Code

### **Ovarian Cancer Detection**

- Devolped a Computer Vision model capable of classifying Ovarian Cancer Subtypes for the **UBC-OCEAN** competition
- Experimented with building custom architectures, including a Shallow-Deep CNN and Radiomics feature extraction, and dealing with custom data
- Tech Stack: Pytorch, Kaggle Notebooks
- Source Code

### Bacefook: a Facebook Clone

- Created a social network clone of Facebook, with full CRUD functionality, in an agile methodology
- Interacted with the full development cycle, including user stories, mock-up design in Figma, database design with UML and both back-end and front-end code
- Tech Stack: Laravel, Bootstrap, PostgreSQL, Figma
- Source Code

## Personal Website

- Designed a personal portfolio website to learn about web technologies and static site generation
- Improved online presence and created a place to aggregate all projects and updates
- Tech Stack: Figma, Astro, Tailwind
- Source Code

### Technical Skills

Proficient In: Python, Javascript/Typescript, HTML, CSS, Java, C/C++, SQL

Explored: C#, PHP, Rust, Lua, Go

AI Frameworks: Pytorch, Huggingface, Scikit Learn, Pandas, Numpy, Seaborn

Web Frameworks: Svelte, SvelteKit, React, Vue, Nest, Tailwind, .NET

**Developer Tools:** Linux, Neovim, VS Code, Git, GitHub