

ANA RAMOS

SUMMARY

I am a biomedical engineer who always strives to learn new things. I consider myself a fast, adaptable, and continuous learner who is organized and self-taught.

PROFESSIONAL EXPERIENCE

OTO Systems

Junior Full Stack Engineer

October 2020 – present

I do a variety of tasks like writing internal/user documentation, code, or even support.

As a full stack developer I'm involved in both frontend and backend tasks. In the frontend side, I develop frontend components using **ReactJS**, mostly **Typescript**. On the backend side, I use **Kotlin** for editing or adding services for our existing API's and creating new ones as requested.

My engineering team is spread between Portugal and Switzerland, so we plan, track and manage our agile and software development projects with Jira, Zeplin, Slack. We also use **Git** as version control system.

Nonius Software

Software Engineer Trainee

January 2020 – October 2020

I started a project in which I was responsible for the design of the architecture and the development of a chatbot to be used by the Nonius support team as well to be integrated in the Nonius Website (performing Human Handoff).

My work started by analyzing the chatbot frameworks(cost-effective benefits, required architecture, time of development, ...) and determining the respective pros and cons. In addition, I also developed different demos, using **Wit.ai** (with **Python** on the server side in combination with the **Django web framework** for the frontend) and using **DialogFlow** (with **Node.js**), which was originally integrated with Google Assistant. In the end, I worked with **DialogFlow** framework, using Node.js for the server side. The frontend was provided by the integration with Tiledesk.

EDUCATION

University of Minho, Braga, Portugal

Integrated Master's Degree in Biomedical Engineering

September 2014 – November 2019

Multidisciplinary degree that prepared me for the following areas: biology and biochemistry, chemistry, electronics, computer science, mechanics, physics, physiology, statistics and others.

The **Master in Medical Informatics** offered training in the following IT subjects: cryptography, Distributed Programming, Data Mining and Machine Learning, Medical Imaging, Operating Systems Architecture, Databases (MySQL and PostgreSQL), including a master thesis in Deep Learning techniques for medical imaging. The dissertation resulted from the work of the Bioengineering and Telemedicine Group in combination with the investigation of deep learning approaches for the classification of breast diseases using X-rays.

Polytechnic University of Madrid, Madrid, Spain

Bioengineering and Telemedicine Group

September 2018 – February 2019

I joined the Bioengineering and Telemedicine Group to investigate and develop deep learning approaches to segment the brain of stroke patients using magnetic resonance imaging with no ground-truth label.

CERTIFICATES

October, 2020: Principles of Secure Coding

June, 2020: Server-side Development with NodeJS, Express and MongoDB

May, 2018: English B1 Course – BabeliUM Centro de Línguas

January, 2015: CAD Workshop: SolidWorks software – University of Minho

SKILLS / KEYWORDS

Problem Solving, Open-mindedness, Fast Learner
Databases: PL/SQL, PostgreSQL
Deep Learning frameworks: Keras and Tensorflow (Python)
Backend: Node.js, Python, Kotlin
Frontend: Typescript, Javascript (React.js)
API Protocols: REST
Unix: macOS
Version Control Systems: Git

ACADEMIC PROJECTS

- Brain Segmentation of stroke patients without a ground-truth label (**Deep Learning-Python**)
 - CNN network approach to classify 1000 different pills (**Deep Learning-Python**)
 - Database of pharmaceutical management (**framework Django**)
 - Image J plug-in for extraction and classification of ulcer features (**Java plug-in**)
 - Implementation of auction systems (**C Language**)
 - Impl. of multi-agent systems for pharmacy management with **Java Agent DEvelopment Fram.**
 - Data Mining techniques to predict the internment interval in breast tumor surgery (**Prolog;Weka**)
 - Applications of **Talend** and **Power BI Software's** to analyze breast cancer factors
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PUBLICATIONS

A Study on CNN Architectures for Chest X-Rays Multiclass Computer-Aided Diagnosis . May 18, 2020. Trends and Innovations in Information Systems and Technologies. WorldCIST 2020. Advances in Intelligent Systems and Computing, vol 1161. Springer, Cham