ANA RAMOS

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.

(+351) 9162342980 | anaforamos@gmail.com
LinkedIn: @anaforamos
Github: @anaoramos
Portfolio: https://anaoramos.github.io

CERTIFICATES

- **Oct, 2020:** *Principles of Secure Coding*, Coursera
- **Jun, 2020:** *Server-side Development with NodeJS, Express and MongoDB*, Coursera
- **May, 2018:** *English B1 Course* – BabeliUM Centro de Línguas
- **Jan, 2015:** *CAD Workshop: SolidWorks software* – Univ. 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**)
- Implementation of multi-agent systems for pharmacy management with **Java Agent DEvelopment Framework**

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

PROFESSIONAL EXPERIENCE

JUNIOR FULL STACK ENGINEER

OTO Systems, October 2020 – present

OTO Systems is a company that uses Machine Learning for speech processing and has already analyzed millions of audio files to extract valuable information from them. There are a few points about my work:

- Develop front-end components and fix bugs in our Demo tool, which is integrated into our website and used for sales demonstrations (**ReactJS - Typescript**)
- I worked on the design and the implementation of an internal management tool that is now in production, and allows the sales team to register/update customers information. This task was previously done by my team. I worked on the implementation of the API (**Kotlin**) and developed most of the components in the front-end (**ReactJS - Typescript**).
- Editing or adding services for our existing API's and creating new ones as requested (**Kotlin**)
- Update and create internal documentation as well as our API and SDK documentation so that it is user-friendly and clear for us or our users.
- We use **Git** as a version control system.
- Provide support to our customers. My engineering team is responsible for providing support. So we set a rotating schedule (one week per person) in which we clean up some dubs, show our documentation or even solve some problems they find.
- My engineering team is spread between Portugal and Switzerland, so we plan, track and manage our agile and software development projects with Jira, Zeplin and Slack.

SOFTWARE ENGINEER TRAINEE

Nonius Software, January 2020 – October 2020

Nonius provides hospitality technology fully integrated with hotel's management systems.

- I was responsible for analyzing different chatbot frameworks(cost-effective benefits, required architecture, time of development,...) and determining the respective pros and cons
- I developed different demos, with **Wit.ai** (using **Django Web Framework** and **Python**) as with **DialogFlow** (with **Node.js**) frameworks.
- It was selected the **DialogFlow** framework (using **Node.js** on the server side) that was integrated with Tiledesk
- The chatbot was integrated with OTRS, allowing to create tickets for support
- It was implemented the capacity to perform *Human Handoff*
- I co-worked with the support team leader, in order to optimize the chatbot and detect some bugs
- I was also responsible for present the chatbot to the Nonius Team members, as well as provide a tutorial presentation for the support team

By the time I left the company I had released the first version, which was already being used for the Nonius support team to create tickets for OTRS.

EDUCATION

UNIVERSITY OF MINHO

Integrated Master's Degree in Biomedical Engineering, 2014 - 2019

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

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 andTelemedicine Group in combination with the investigation of deep learning approaches for the classification of breast diseases using X-rays.

POLYTECHNIC UNIVERSITY OF MADRID

Research Student in Bioengineering and Telemedicine Group, Sep. 2018 - Feb. 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.