Francisco Bicudo

Software Engineer

franciscobicudo.com

SUMMARY

Recent **MSc** graduate in **Software Engineering** with an interest in **Fullstack Development** and **Deep Learning.** Looking for full time remote work.

First author of a **research paper** published at EPIA 2024**.** Examples of my work can be found on my **website**.

Fluent in: **English, Portuguese, French**   Located in: **Lisbon, Portugal**

Skills: **Java**, **Js**, **React, SQL, Python**, **Tensorflow**   Characteristics: **Strong communication**, **Motivated learner**

EXPERIENCE

Research on Processing Cetacean Audio Using Entropy and Deep Learning

NOVA SST

2023-2024

Multidisciplinary work involving traditional software, machine learning, media(sound), and biology.

- Developed an automatic processing solution for dolphin and whale recordings that produces useful samples from fresh data, aiding both biologists and fellow machine learning researchers.
- This included the creation of a highly efficient entropy based denoising method for vocalisation spectrograms and a Convolutional Neural Network based Classifier to detect their presence in long underwater recordings.
- A small prototype application: *Dolphin Detector* was also produced in order to make the resulting solution available to biologists.

This work was done in collaboration with the team at Madeira's Whale Museum as part of my master's thesis and produced the research paper mentioned above. In addition to the technical aspects, the jury highlighted the quality of communication and presentation.

A Letter of recommendation from my advisor can be found here.

Frontend Development Internship

Uniksystem

Oct 2021- Feb 2022

- Completed in the context of a university course with the goal of gaining practical experience.
- Participated in the frontend development of Uniksystem's Onboarding product using React.

EDUCATION

Integrated Masters in Computer Science and Software Engineering

NOVA SST

2018-2024

Examples of course projects:

- Machine learning/Deep learning - Training of both traditional machine learning and deep learning models using python + sklearn, keras, tensorflow.
- Human machine interaction - Android app using flutter.
- WebGeo - Boating Map application using Leaflet.
- Cloud computation systems - Auction backend application using Microsoft Azure.
- Software Quality - Black and White box test design.

Baccalauréat Géneral série S

Lycée Français Charles Lepierre

2003-2017

French international school in Lisbon.

ADDITIONAL INFORMATION

Volunteer Work - CASA

I participate in biannual food collection campaigns, where I am responsible for a small group of volunteers.

Hobbies: Building Computers, Games, D&D

Sports: Swimming, Hiking, Sailing - Portuguese Boat License (Patrão de costa)

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