

Diogo Amaro

diogoaia10@gmail.com | 966 887 223 | Lisbon, Portugal

EDUCATION

NOVA School of Science and Technology

Integrated Master's in Biomedical Engineering

Sept. 2020 - Present

Lisbon, Portugal

EXPERIENCE

PLUX Biosignals

Internship – Python, MatLab, OpenSignals

Jan. 2023 – April 2023

Lisbon, Portugal

- Collected, processed and analyzed a new set of biomedical data.
- Developed an algorithm to study the behavior of electrodermal activity under stress conditions.
- Tested the efficacy of a new prototype for biomedical signals acquisition.

Alcoitão Rehabilitation Medicine Center

Internship – Vicon Nexus, SolidWorks

Sept. 2022 – Dec. 2022

Alcoitão, Portugal

- Analyzed the characteristic gait cycle of patients with lower limb motor impairments.
- Created an alternative physiotherapy routine for patients with muscular atrophy.
- Studied the effectiveness of a pressure plate as a measurement for weight distribution imbalance.

PROJECTS

Electrocardiogram

Python, MatLab, LTSpice

Sept. 2023 – Dec. 2023

Lisbon, Portugal

- Construction of a totally functional electrocardiogram.
- Development of a software compatible with the ECG.

Muscle Contraction Detector

Python, SQL

March. 2023 – Jun. 2023

Lisbon, Portugal

- Development of a Machine Learning model to detect muscular contractions and recognize patterns in electromyography activity of individuals with amyotrophic lateral sclerosis.

Non-Spherical Door Knob

Python, SolidWorks

Feb. 2022 – July. 2022

Lisbon, Portugal

- Analysis of the geographical distribution of upper limb motor impairments.
- 3D prototyping of an ergonomic door knob for individuals diagnosed with arthritis.

SKILLS

Programming: Python, MatLab, R.

Frameworks/Packages: PyTorch, Jupyter, Scikit-Learn, Git, Docker, Kubernetes, Numpy, Pandas.

Domains: Data Cleansing, Data Analysis, Data Visualization, RDBMS, MLOps, Computer Vision, NLP.

CERTIFICATIONS

University of Cambridge

FCE – Cambridge English: First (B2)

July 2019

Lisbon, Portugal

University of Cambridge

ESOL Internacional Qualification

Aug. 2018

Lisbon, Portugal