Simão Amaro

Lisbon, Portugal (+351) 96 555 44 95 simaoamaro1999@gmail.com https://github.com/Simao123 133

EDUCATION

Instituto Superior Técnico, Lisbon — Master Degree in Aerospace Engineering

September 2020 - October 2022 Grade 17/20

WORK EXPERIENCE

Robust Thrust Vector Control of Launch Vehicles — Summer internship and Thesis at Spin.Works - Ongoing

Development of robust and nonlinear controllers.

PROJECTS

Development of a website to store recipes - Link

Using Django for the backend, with integration of SQLite3 to create the models. A total of 5 models were created, including recipes, ingredients and one to store an ingredient and its quantity. With these models, the website automatically displays the nutritional information of each recipe. The frontend was made with Django Forms and Bootstrap. To host the website I used Heroku and to store files, Cloudinary. There is also an authentication system allowing the server to have several users.

Development of an app to visualize data from the solar boat - *Link*

Developed an app using PyQt5 to visualize data offline and in real time. The app communicates with the Boat by MQTT and within the App it is possible to customize how many graphs there are, the number of signals on each graph, the time window of the incoming data, etc. Using Pyinstaller, executables were created that run on Windows, Linux and macOS.

Bayesian network to classify sets of data — *University*

Created a Bayesian network to classify sets of data in Java. Its development was made on Eclipse.

SKILLS

C#, Python, Java, C, C++, JavaScript, HTML, CSS, MATLAB.

Git, Django, Bootstrap, SQL, Angular, PyQt5, Machine Learning, ROS.

AWARDS

Second place in Njord - The Autonomous Ship Challenge.

Second place in Water 2021 solar boat race.

First place in Monaco Solar & Energy Boat Challenge
Innovation Prize 2020 for the development of a hydrogen powered boat with our own fuel cell.

First place in CA2ECT
Santander Prize for the
construction and
development of a hydrogen
fuel cell.

LANGUAGES

Native Portuguese Speaker.

C2 English.

A2.2 German.