

### **Profile**

Skilled and passionate, graduated on Computer Science and Engineering with final score of 14 at ULHT, and with an interest in Artificial Intelligence and Data Science. Decided to get a Master's Degree in Artificial Intelligence at FCUL, and got the chance to work on several projects that focused on Data Mining, Machine Learning, Deep Learning and more.

Always trying to acquire more knowledge and finding ways to improve myself. I'm a people-person who enjoys and looks forward to working with other people and try my best to help my colleagues. I might not have a lot of working experience but I'm determined to learn and improve my skills to overcome whatever challenge there may be.

## **Education**

Certificate in Advanced English, University Of Cambrigde

2017

Cambridge English Level 2 Certificate in ESOL International

Bachelor's Computer Science and Engineering, ULHT, Lisbon

SEPTEMBER 2017 - JULY 2020

Final Score of 14 out of 20

Master's Computer Science and Engineering in Artificial Intelligence, FCUL, Lisbon

SEPTEMBER 2020 - JULY 2022

Master Thesis - Deep Learning For Predicting Disease Progression of Clinical Endpoints in ALS

Current Score of 16 out of 20

# **Employment History**

Technology Consultant, KPMG, Lisbon

SEPTEMBER 2022 - PRESENT

Advisory - Technology Consulting

Sales Assistant, Worten

SEPTEMBER 2018 - OCTOBER 2019

Department of Kitchen Appliance.

# **Projects**

Master Thesis - Deep Learning For Predicting Disease Progression of Clinical Endpoints in ALS, Lisbon

AUGUST 2021 - OCTOBER 2022

Amyotrophic Lateral Sclerosis (ALS) is a neurodegenerative disease with no cure and a short life expectancy following the start of symptoms, with most patients dying of respiratory failure within 3-5 years. Only a few of the available treatments increase the life expectancy by a few months. Given that ALS affects most muscles of the body, there will exist many clinical conditions that require some kind of treatment,

#### **Details**

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#### Links

<u>Portofolio</u>

Linkedin

Github

#### Skills

Artificial Intelligence

Deep Learning

Machine Learning

**Data Science** 

Python

Java

**Object Oriented Dev** 

Web Dev

#### Languages

Portuguese

**English** 

#### **Hobbies**

Motorcycle Riding
Travelling
Learning more about Tech
and Artificial intelligence
advancements
Hanging out with friends and
family
Help an association that rescues
Greyhounds

which motivates the study of algorithms to analyze the evolution of other clinical endpoints. We made use of deep learning models (MLP, CNN and LSTM), to predict disease progression based on temporal clinical data. The results obtained show promise, to the prediction of disease progression using deep learning models .

#### **Predicting Diabetic Retinopathy Using CNN's**

FEBRUARY 2021 - JUNE 2021

The creation of a Convolutional Neural Network, in conjunction with image preprocessing, eliminating noise from the dataset and exacerbating pathology features, through the use of Python with the dependencies of the tensorflow and keras. In order to be able to initially distinguish between whether or not you have ocular pathology (Binary Classification), and then distinguish by the different types of existing pathology, the data is on a scale of 0-4.

#### **Neural Network to play Asteroids**

FEBRUARY 2021 - JULY 2021

In order to create an AI able to play the Asteroids game, we made use of the genetic algorithm to create several evolutionary Neural Networks, it consists on a random initial population of neural networks, and by the use of natural selection, where the fittest individuals are used to create a new generation, that receives the information of them, they can be altered by cross-over or mutations.

With this, a initial population of games is created, and by surviving and destroying more asteroids they will be rewarded, increasing their fitness. After a set number of generations played, the output is the best model of the last generation, that evolved as the generations passed.

#### Traffic Simulation Using Python & Pygame

SEPTEMBER 2020 - FEBRUARY 2021

The creation of a traffic simulation of a city through the use of several agents. To do this, we created a mechanism of two types of agents, the cars and the traffic lights, which interact with each other autonomously. The solution presented was possible through the use of Python and Pygame, in order to create a live representation and movement options.

#### Predicting protein-protein interactions with protein embeddings

FEBRUARY 2021 - JUNE 2021

The goals include seeing which is the best and most efficient supervised machine learning algorithm, which is the best embedding combination operation, and the main goal is the prediction protein-protein interaction using a learning machine model. All the necessary information was extracted from a dataset provided to us. After verifying which supervised machine learning algorithm got the best parameters using the most embracing dataset, we chose the best one to go on. We made use of Python language, and as dependencies scikit-learn, Numpy and Pandas.

### Extra-curricular activities

#### Volunteer Staff, Web Summit

2019

Coordinating the Airport Registration Volunteer Team.

#### Finalist - Leadership Tournament, AIESEC in Portugal

201

I participated in a case study regarding Siemens and maximizing the assets of the Human Resources.