# **CARLOS SIMÕES**

#### **ELECTRICAL AND COMPUTER ENGINEER**

#### **ABOUT ME**

Enthusiastic soon-to-be engineer, eager to learn and make a positive impact on the world through work and life. I strongly believe in technology as an enabler of change, and would like to help steer this change in the right direction.

My interests include Robotics, Artificial Intelligence, Computer Vision and Machine Learning.

#### **MY EDUCATION**

# MSc Electrical and Computer Engineering

**IST-Instituto Superior Técnico Q** Lisboa, Portugal

- Major: Systems, Decision and Control [Decision & Control & Robotics, Systems and Signals]
- Minor: Computers [Computer Architecture and Network Management]

BSc Electrical and Computer Engineering

**UC-Universidade de Coimbra ♀** Coimbra, Portugal

**=** 2015 - 2018

Technological Specialization Course in Energy and Automation

Instituto Superior de Engenharia de Coimbra 

Coimbra C

- Plan, program, install and maintain Energy equipment and installations
- Robotic systems and control systems: Industrial and Home automation

Professional Course in Renewable Energy

Escola Secundária de Avelar Brotero O Coimbra, Portugal

**=** 2011 - 2014

## **MY EXPERIENCE**

# Freelancer - Network Engineer

Pleez Lisboa, Portugal

**=** 2020 - 2020

- Responsible for maintaining and installing computer network

# General Coordinator of the Pedagogy Department

**Electrical Engineering Student Association** • Coimbra, Portugal = 2017 - 2018

- Implemented the "Delegates of the Year"
- Raised awareness and pedagogical training of both teachers and students
- Launched and Promoted pedagogical surveys and Pedagogical Forums
- Restructured the curriculum reform of MIEEC

# Internship

Installatiebedrijf Andriessen ♀ IJsselstein, Utrecht, Netherlands 🖮 2014 - 2014

- Designed and developed in AutoCAD 3D and 2D for the BMV Veiden project

#### Internship

### **ACOMPLISHMENTS**

EF SET English Certificate (C2 Proficient) EF Standard English Test 📋 2020

Computer Vision Basics University at Buffalo i 2020

Getting Started with AWS Machine Learning Amazon Web Services (AWS) 📋 2020

MOOC - Simulação e Controlo de Drones Instituto Superior Técnico 🖮 2020

MOOC - Matrizes de Markov 2020 Instituto Superior Técnico 🚊 2020

Problem Solving (Basic) HackerRank iii 2020

Python (Basic) HackerRank iii 2020

Top 3% of Students Award University of Coimbra 2016–2017 TechChallenge2017 (2nd Place) hosted by blue-infinity 2017

#### HARD SKILLS

Python
Matlab
C/C++
PLC programming
Version Control, Git
MySQL
Signal Processing
Java

#### **MY PROJECTS**

# Master's Thesis

ISR - Instituto de Sistemas e Robótica

2020 - Ongoing, IST

#### **Smart Office Illumination**

#### C++. MATLAB and Arduino

Real-time control of a smart office illumination system using Arduinos and Raspberry Pi

#### **Artificial Intelligence**

### Python

- -Airline Scheduling And Routing (ASAR) problem. Implementation of A\* Algoritm
- -Addresses the problem of fire detection in a museum

# Travelling salesman problem (TSP)

# Java

The ant colony optimization (ACO) algorithm

# Veterinary hospital

MySQL and PHP

Veterinary hospital database and web application

## **Robotics**

#### Matlab

Direct and Inverse Kinematics

Basic Navigation Strategies for Mobile Robots

# Software to Manage a Parking Lot

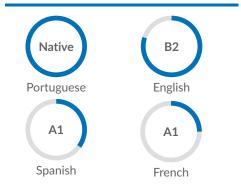
C#, C/C ++, MSAccess

Management of a parking Lot where a graphic platform and database has been integrated

# **SOFT SKILLS**



# **LANGUAGES SKILLS**



## WHAT I ENJOY

Travel

Getting lost

Chess