António Morais

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OBJECTIVE
Graduate student looking for work opportunities in the field of Computer Vision.

CORE SKILLS
Python (5 years), C (4 years), C++ (1 year), PyTorch (1 year), OpenCV (1 year)

EDUCATION
University of Coimbra <div align="right">Coimbra, Portugal</div>
Master's in Computer Science, Intelligent Systems <div align="right">September, 2019 − September, 2021</div>

University of Coimbra <div align="right">Coimbra, Portugal</div>
Bachelor's in Computer Science <div align="right">September, 2016 − July, 2019</div>

WORK EXPERIENCE

University of Coimbra <div align="right">Coimbra, Portugal</div>
Student Researcher <div align="right">January, 2021 − September, 2021</div>

Researching ways to improve the fault-tolerance of CNNs in safety-critical systems as part of my Master's thesis
- Implementing and modifying CNN models for Image Classification in **C++** using **PyTorch** and **CUDA** in **Linux**
- Image preprocessing with **OpenCV** in C++ and **Python**
- Part of the AI4EU project (https://www.ai4eu.eu/)

CISUC - Centre for Informatics and Systems of the University of Coimbra <div align="right">Coimbra, Portugal</div>
Student Researcher <div align="right">October, 2020 − December, 2020</div>

Improved explainability of an Object Detection model used to detect and prevent the spread of forest fires
- Modified the source code (**C**) of a *YOLOv4* model in the **Darknet** framework
- Developed functions in Python that integrate Darknet with an Explainable AI library (LIME)
- Used **Jupyter Notebook** in Linux to preprocess images with OpenCV and train/test the models with CUDA
- Source code and examples available at https://github.com/AntMorais/yolime

University of Coimbra <div align="right">Coimbra, Portugal</div>
Student Researcher <div align="right">April, 2020 − September, 2020</div>

Worked as a Full Stack developer for a web app that evaluates student's understanding of the lecture material during class
- Data visualization in Python using Dash, Matplotlib, Numpy and Pandas
- Back end programming using Python, Requests and Docker

Bosch Portugal <div align="right">Ovar, Portugal</div>
Summer intern <div align="right">August, 2019</div>

Full Stack development of a web app that allows users of Azure DevOps to manage templates and apply them to existing work items
- Front end using Bootstrap, HTML+CSS, JavaScript and JQuery
- Back end with Flask, Python and Azure DevOps API

OTHER SKILLS
Data Science/Machine Learning: Geopandas, Keras, MATLAB, PySpark, R, Scikit-learn, Scipy, TensorFlow
Databases: ArangoDB, MySQL, Neo4j, PostgreSQL
Languages: Portuguese (Native), English (C2 Proficiency), French (A1)