

Bruno Barbosa

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Education

University of Minho

MSc in Software Engineering

Braga, PT

September 2021 - December 2023

- Specialization in **Artificial Intelligence, Computer Vision** and **Computer Graphics**
- Final grade: 17 / 20

University of Minho

BSc in Software Engineering

Braga, PT

September 2018 - June 2021

- Final grade: 13 / 20

Skills

Programming Languages	Python, C, C++, Shell, GLSL and SQL
Languages	Portuguese (native) and English (B2)
Frameworks	Tensorflow, Pandas, Scikit-learn, ImGui, OpenMP and OpenCV
Others	Git, Linux, LaTeX and Excel

Projects

MSc Thesis - Afterthought [↗](#)

Final grade: 18

Python, Tensorflow and Keras

2023

Toolkit that encompasses the state-of-the-art of CNN feature visualization techniques, Activation maximization, Image processing, Style transfer, Feature inversion, Attribution and Explanation

Data gathering [↗](#)

Final grade: 18

Python, Google Data Studio, TomTom API, Open Weather Map API, Pandas and Scikit-learn

2022

Virtual sensors (API's), Sensor fusion, Data exploration and treatment, Random Forests, Problem discussion and resolution for cities and Data visualization

GAN Art [↗](#)

Final grade: 19

Python, Tensorflow and Keras

2022

CycleGAN and Style transfer

Image classification on GTSRB [↗](#)

Final grade: 18

Python, Tensorflow, Keras, OpenCV and German Traffic Sign Recognition Benchmark (GTSRB)

2022

Computer vision, Image processing, CNN, Data Augmentation and Ensemble

Brain age prediction on Kaggle [↗](#)

Final grade: 18

Python, Pandas and Scikit-learn

2022

Kaggle competition [↗](#), Data exploration and treatment, Random Forests, XGBoost, Data Augmentation and Ensemble

Over the Top service for multimedia delivery [↗](#)

Final grade: 19

Python, Tkinter and Core

2022

Over-the-top (OTT), Protocol Development, Streaming, Multithreading, UDP, Heartbeat mechanism, Routing, Flooding, RTSP and RTP.

Sales management system [↗](#)

Personal project

C, GDB and Valgrin

2022

Big data, MVC, Data structures, High memory scalability and performance

Wikis deployment [↗](#)

Final grade: 19

Ansible, GCP, Kubernetes, Cloud SQL for MySQL, JMeter and Docker

2021

Instance scaling, Load balance and proxy, Cloud computing, Application maintenance and Deployment

Traffic classification on Kaggle [↗](#)

Final grade: 16

Python, Pandas and Scikit-learn

2021

Kaggle competition [↗](#), Data exploration and treatment, Random Forests, XGBoost, Hyperparameter optimization and Feature engineering