António Capela

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Links

GitHub **antcap96**
Linkedin **appcapela**

Education

IST

Bachelor's degree in Engineering Physics
Sep 2017 Lisbon

IST

Master's degree in Mathematics and Applications
Sep 2020 Lisbon
Dissertation: An Adaptive and Transferable Dialog Management System for Social Aware Task Execution [1]

Skills

PROGRAMMING

Python | Julia | SQL | Rust | C | C++ | Scala

MISCELLANEOUS

Linux | LaTeX | Git | Azure | Bash

Languages

ENGLISH

C1
Certificate obtained by achieving grade A on the FCE exam in 2013.

PORTUGUESE

Mother Tongue

Certificates

MICROSOFT – AZURE

Azure Data Scientist Associate
Azure AI Engineer Associate

Experience

MACHINE LEARNING INTERN

LIP Summer Internship
July 2017 – August 2017 Lisbon, Portugal

- Data analysis on simulated data of di-Higgs production from CERN's ATLAS experiment.
- Development of a Machine Learning model with Neural Networks and Boosted Decision Trees to identify collisions that generate di-Higgs particles.

Python | Keras | Data Analysis | XGBoost

DATA SCIENTIST

Data Scientist Consultant at Xpand-IT
Oct 2020 – current remote work, Portugal

- Currently allocated to a large retail company, developing in Azure Databricks, having worked on:
  - Development of demand forecasting models based on gradient boosting trees.
  - Introducing a MLOps pipeline with Azure DevOps pipelines.
  - Implementing metrics and visualizations for model quality monitoring.
  - Development of a data quality validation framework.
- Worked with the Data Science team at major Portuguese bank for over 1 year. Some of my key responsibilities included:
  - Creating ETL pipelines using pyspark that were orchestrated with Kedro and Apache Airflow;
  - Development of Machine Learning models to be used by other teams at the bank.
- Developed a classification model in Azure Databricks for a major european agency. The model, a gradient boosting tree (LightGBM), was implemented as a real-time inference model in a Kafka stream.
- Worked for an Irish Startup, where we developed an image classification model. The model utilized a Convolutional Neural Network implemented with Keras, leveraging transfer learning from the VGG16 model.
- Performed sentiment analysis using Azure Cognitive Services and keyword extraction with YAKE to identify reasons for complaints in feedback forms.

Databricks | Python | Machine Learning | Spark | ETL | Azure | Sklearn | Keras

References

[1] Antonio Capela et al. "An Adaptive and Transferable Dialog Management System for Social Aware Task Execution". In: *EPIA Conference on Artificial Intelligence*. Springer. 2019, pp. 232–243.