



Rúben Albuquerque

Computer Engineer

📍 Lisbon, Portugal

📞 926089235

in Rúben Albuquerque

✉ rubenaalbuquerque@gmail.com

📁 Portfolio

EDUCATION

Instituto Politécnico de Lisboa, ISEL [🔗](#)

2024

Master's Degree in Informatics and Multimedia Engineering

Instituto Politécnico de Setubal, ESTB [🔗](#)

2021

Degree in Bioinformatics

PROFESSIONAL EXPERIENCE

Computer Engineer: Data Analyst & Front-End Developer

2021

Centro de Medicina Laboratorial Germano de Sousa [🔗](#)

- Used Python skills (NumPy, Matplotlib, Pandas) to **extract, clean** and **analyze data** from the Watson for Genomics AI platform, resulting in the identification of relevant patterns and insights into platform performance.
- Implemented statistical analysis techniques and created **data visualizations** to effectively communicate findings to stakeholders, contributing to informed decision-making processes about the performance of the Watson for Genomics AI platform.
- Created an interactive and visually interface using **HTML, CSS** and **Javascript** for a presentation on the Watson for Genomics AI platform's potential in analyzing genetic variants. Incorporated graphics and design elements to clearly convey advantages of the platform to stakeholders.

PROJECTS

Image Classification Project with Convolution Neural Networks [🔗](#)

2022

Python, Pandas, Numpy, Keras and TensorFlow

- Created and trained convolution neural networks to perform binary and multi-class classification of images taking into account the peculiarities of the Oxford-IIIT Pet Dataset.
- Implemented **data augmentation** techniques to enhance classifier performance and handle image dimension variability, leading to a 15% increase in precision and recall.
- Utilized libraries to **preprocess data, develop CNN models**, and assess classifier performance, resulting in a 20% improvement in accuracy compared to previous methods.
- Leveraged functionality of libraries for resizing images to predefined dimensions, ensuring consistent quality across datasets and improving model generalization by 10%.

Book Recommendation Engine with Machine Learning

2022

Python, Keras and Tensorflow

- Development of a book recommendation algorithm using K-Nearest Neighbors, providing personalized suggestions to users.
- Utilization of the Book-Crossings dataset, containing over 1.1 million ratings, to create an efficient and relevant recommendation system.

Neural Network SMS Text Classifier

2023

Python and Tensorflow

- Development of a machine learning model to classify SMS messages as either "ham" or "spam" using the SMS Spam Collection dataset.
- Visualizing the model's performance metrics, including precision, recall, and ROC curve, to gain insights into its strengths and weaknesses in classifying "ham" and "spam" messages.

SKILLS

Web development (HTML, CSS, React, JavaScript, Tailwind, Bootstrap)

Data Scientist (SQL, Python, PySpark, Scikit-learn, TensorFlow, Pandas, NumPy, Matplotlib, Seaborn)

Outras Skills (Git, Pytest, Docker, Bash, Excell)

COURSES AND CERTIFICATES

Machine Learning with TensorFlow - FreeCodeCamp [🔗](#)

2023

HTML, CSS, and JavaScript for Web Developers - Coursera [🔗](#)

2022

Python fundamentals for Data Analysis - Data Science Academy

2021

Python and Django Framework for Beginners - Coursera [🔗](#)

2021