DAVID MORAES

(44) 07470258187 | moraes.david02@gmail.com
https://www.linkedin.com/in/david-moraes-a70289116/
https://github.com/DavidAnand02/Portfolio-Projects
London, EC1R4TY

Academic Qualifications

BSC (HONS) ACTUARIAL SCIENCE - LONDON SCHOOL OF ECONOMICS & POLITICAL SCIENCE   Sep 2021-2024

Relevant Courses: Inferential & Descriptive Statistics, Calculus & Linear Algebra, Corporate Finance, Financial & Management Accounting, Survival Modelling, Actuarial Financial Investigations, Machine Learning, AI, Ethics for Data Science & Databases.

INTERNATIONAL A-LEVELS   June 2019-2021

Pearson Edexcel: Mathematics - A*, Further Mathematics - A, Economics - A | Oxford AQA: Physics - A*

Projects

PYTHON/MONGODB: HOSPITAL AND PHYSICIAN MANAGEMENT DATABASE SYSTEM   Jan 2024

- Executed **MongoDB queries** to retrieve and display essential information about doctors, patients, finances etc…
- Developed an **aggregation pipeline** to calculate total revenue by patient, considering different procedure types.
- **Visualised** temporal queries e.g health evolution of patients, using Matplotlib
- Performed **queries** involving update/delete structures, calculations, views, retrieve, filter and aggregate

SQL/TABLEAU: COVID-19 EXPLORATORY DATA ANALYSIS & DASHBOARD   June 2023

- Utilized **joins**, **CTEs**, **temp tables**, and **data type conversions** for efficient data retrieval and aggregation.
- Applied **window functions** and aggregate functions to calculate death & infection % and rolling counts of vaccinations.
- Developed a **view** to simplify data access and integrated with **Tableau**, creating a dashboard.

EXCEL: BIKE SALES DYNAMIC DASHBOARD & VISUALISATION   June 2023

- Ensured **data quality** of 1000 rows by **removing duplicates & null values**.
- Utilized **pivot tables** and **charts** to visually represent trends in data, enabling clear and insightful analysis.
- Integrated **slicers** to customize the map view, enhancing user interaction and exploration.

R PROGRAMMING: ACTUARIAL SURVIVAL MODELLING   May 2023

- Performed **optimization** in R studio with the optim function to find **MLE's**.
- Applied **statistical tests** to analyze and interpret data, including **survival analysis** and Cox proportional hazards modeling.
- **Cleaned**, processed data and used **survival** package in **R studio**.

Experience and Competition

GROVE FINANCE START-UP   March 2024

- **Reported** on how **direct lending** and **equity release** can be leveraged in the UK's childcare industry.
- **Researched** Grove's industry, market gaps, competitors, target demographic, trends and opportunities.
- **Collaborated** with an **international team** to present report to founder.

1ST PLACE IN THE INTER-AMERICAN DEVELOPMENT BANK CHALLENGE   Feb 2024

- **Contrasted 3 correlation models** for stock returns of financial and non-financial companies across Latin America.
- **Accounted** for 20 economic, socio-political and financial indicators using AIC, Ridge and Lasso regression.
- **Predicted** future correlations across several industries using a **neural net** & presented **statistically significant** findings.

Skills

Python Programming	R Programming	Excel
Libraries: seaborn, matplotlib, Ml models	Packages: dplyr, ggplot, tidy models	Tools: Pivot Table, Pivot Chart, XLOOKUP, learning VBA
Tableau	**SQL**	
Tools: Charts, dynamic maps, joins	Software: Microsoft SQL Server Express	