Ayaan Omair

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EDUCATION

Master of Science, Data Science   **December 2025**
Texas A&M University, College Station, TX

Bachelors, Mathematics (Statistics); Psychology minor   **August 2020 - May 2024**
Arizona State University**,** Tempe, AZ   3.90 GPA *(summa cum lade)*

TECHNICAL SKILLS

Languages and Tools:
- **Python, R, SQL (MySQL, PostgreSQL)**, SAS, JavaScript, HTML/CSS, Linux, Excel, Tableau, Alteryx, Jupyter, LaTeX

Libraries & Machine Learning Methods:
- Pandas, NumPy, Scikit-learn, Matplotlib, **Decision Trees, Regression (Linear, Logistic, Lasso, Ridge, etc.)**, K-Means, SVM, Gaussian Mixture Models, Mean-Shift, DBSCAN

Coursework:
- **Data Mining and Analysis,** Linear Algebra, **Applied Linear Regression**, Mathematical Statistics, Scientific Computing, **Data Wrangling with SQL, Data Analysis with Python, Exploring Data in R/Python,** Applied Analytics

RELEVANT EXPERIENCE

SQL and Python Trainee - Global Tech Experience   **May 2023 - July 2023**
- Devised *SQL* queries to efficiently extract, analyze, and manipulate complex datasets for actionable insights
- Analyzed and visualized data findings using Jupyter Notebook and *Python*
- Gained knowledge of global business strategies by performing exploratory data analysis, data visualizations, and data cleaning
- Collaborated with a global team to perform different tasks using SQL and Python
- Obtained experience using Python and SQL by creating various personal and professional projects

PROJECTS

Disease Prediction Model   **April 2025**
- Constructed *logistic regression* and *decision tree* models in *Python* to predict Heart Disease, Kidney Disease, and Skin Cancer
- Achieved up to 75% accuracy and AUC scores as high as 0.84 across all models, demonstrating strong model performance
- Identified high recall (e.g., 78%) but low precision for positive cases due to class imbalance, highlighting the challenge of predicting rare disease occurrences
- Compared and evaluated model performance using F1 score and AUC, ensuring a comprehensive assessment while confirming model generalizability by observing no overfitting through training and testing accuracy comparison

Grammy Awards Project   **July 2023**
- Leveraged *Python* to perform data analysis and visualization of real website data used by the Recording Academy
- Examined the impact of splitting up a website into two separate websites (grammy.com and recordingacademy.com) by analyzing different variables (number of visitors per day, average session time, user interaction)
- Assessed the data for a better understanding of the different trends and audience behavior on both sites

Traffic Collisions in California Analysis   **June 2023**
- Conducted data analysis using *SQL* to determine the leading causes of accidents in the State of California while using real-time data from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS)
- Visualized and communicated the results using *Tableau* to portray trends in collision data, highlighting peak accident times and comparing crashes caused by texting vs. DUI

PROFESSIONAL EXPERIENCE

SC Del Sol Research Project   **January 2024 - May 2024**
Internship (Internship Credit Course)
- Developed a player dashboard using Excel and Python to assist SC Del Sol youth soccer program coaches navigate player data effectively
- Utilized Excel to design and create a user-friendly dashboard interface for coaches, providing comprehensive player insights and statistics
- Employed Python to clean and preprocess raw data, ensuring accuracy and readability within the Excel dashboard
- Collaborated with SC Del Sol youth staff to understand coaching needs and tailor the dashboard to meet requirements

Sports Data Operator *(Part-time)*   **May 2023 – *Present***
SportRadar
- Watch major sporting events and record events in real-time using a mobile app for statistic gathering
- Attend live sporting events
- Remain knowledgeable of the rules of the sport and the teams/players involved