Peter Romany Frances

Suez, Egypt | E-mail Address | Phone Number: 01277860726 | LinkedIn Profile | GitHub Profile

EDUCATION

Arab Open University - EG | *Bachelor of Science in Information Technology and Computing (Computer Science)*

- Cumulative **GPA:** 3.50 **/** 4 **Graduation | 09.2019 - 02.2023**

The Open University - UK | *Bachelor of Science in Information Technology and Computing (Computer Science)*

- **Classification:** Second Class Honours (1st Division) **Graduation | 09.2019 - 02.2023**

Honors and Awards:

- Completed **Bachelor's degree** in three and a half years.
- Received a Certificate of Excellence in March 2022 for exceptional performance, achieving a high GPA, and demonstrating dedication through hard work.

SKILLS

Technical Skills

Statistical Analysis and Visualization
- Utilize statistical analysis and visualization tools proficiently, including Microsoft Power BI.

Programming Languages
- Expertise: Python, Java, Object-Oriented Programming (OOP)
- Additional Skills: Strong knowledge of SQL; familiarity with HTML and CSS

Descriptive Analytics
- Measures: Central Tendency, Variation, Position, Skewness, Kurtosis

Diagnostic Analytics
- Techniques: Hypothesis Testing, Correlation, Association

Predictive and Prescriptive Analytics
- Techniques: Regression Analysis, Forecasting, Clustering, Classification

Machine Learning
- Pre-Modeling Tasks: Data Wrangling, Feature Selection, Data Splitting, Data Scaling, One-Hot Encoding
- Supervised Machine Learning: Regression, Classification
- Unsupervised Machine Learning: Clustering algorithms
- Algorithm Evaluation: Metrics module for Model Performance Assessment

Statistical Analysis and Testing
- Hypothesis Testing: One-way ANOVA, Two-way ANOVA, Independent-sample t-test, Paired-sample t-test
- Normality and Homogeneity Tests: Shapiro-Wilk, Kolmogorov-Smirnov, Levene test

Data Manipulation
- Utilize Pandas and NumPy for efficient data manipulation.

Functional Skills

Statistics Proficiency
- Analyzing data, validating analyses, and identifying fallacies and logical errors.

Analytical Skills
- Researching and interpreting data, theorizing, and making accurate forecasts.

Problem-Solving
- Generating innovative solutions for complex problems.

Probing Skills
- Identifying and defining problem statements and desired outcomes.

Data Visualization
- Creating clear and compelling visualizations to effectively communicate analysis results.

Hypothesis Formulation
- Formulating new hypotheses or research questions to drive data exploration.

Time Series Forecasting
- Forecasting trends through comprehensive time series analysis.

Exploratory Data Analysis (EDA)
- Conducting EDA to gain valuable insights from complex datasets.

Regular Expression
- Utilizing regular expressions to streamline and enhance data wrangling processes.

Soft Skills: Ability to collaborate effectively with business and cross-functional teams. Effective communication to report and present findings. Naturally curious, allowing new questions to surface, challenging assumptions, and hypotheses, with keen attention to detail.

Work Experience

Data Analyst **January 2023 - Present**

Although I lack formal work experience within a corporate setting, I have diligently honed my skills and expertise through immersive hands-on projects and self-directed learning. Below, I present key highlights from my project portfolio:

Key Projects:

Supply Chain Analytics and Optimization:

- Leveraged Python, SQL, and Microsoft Power BI to analyze supply chain data, identify inefficiencies, and optimize processes for enhanced performance.

Customer Segmentation:

- Utilized K-Means Clustering algorithm in Python to segment customers based on their purchasing behavior, facilitating targeted marketing strategies and personalized customer experiences.

Credit Card Fraud Detection:

- Employed Machine Learning techniques in Python to develop a fraud detection system, effectively identifying and preventing fraudulent transactions.

Breast Cancer Classification:

- Applied machine learning algorithms to classify breast cancer tumors as malignant or benign, contributing to early diagnosis and improved patient outcomes.

Diabetes Prediction:

- Developed a predictive model using machine learning algorithms to forecast the likelihood of diabetes onset based on patient health data, aiding in preventive healthcare measures.

Gold Price Prediction:

- Utilized time series analysis and machine learning algorithms to predict gold prices, providing valuable insights for investors and traders in the commodities market.

Medical Insurance Cost Prediction:

- Employed regression analysis and machine learning techniques to predict medical insurance costs for individuals based on various factors such as age, BMI, and smoking habits, assisting insurance companies in risk assessment and pricing strategies.

Portfolio Website:

Explore my comprehensive portfolio of projects and reports on my dedicated website. Visit My Portfolio Website to delve into detailed case studies, view project highlights, and gain insights into my data analysis and visualization expertise.

COURSEWORK

IBM Data Analyst Professional Certificate **Coursera, 2023**