# **Peter Romany Frances**

Egypt, Suez | 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:**

Proficient in utilizing statistical analysis and visualization tools, including Microsoft Power BI.

# **Programming Languages:**

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

#### **Descriptive Analytics:**

Mastery in applying Measures of Central Tendency, Variation, Position, Skewness, and Kurtosis for insightful data exploration.

#### **Diagnostic Analytics:**

Skilled in conducting Hypothesis Testing, Correlation, and Association to uncover patterns and relationships.

# **Predictive and Prescriptive Analytics:**

Proficient in Regression Analysis, Forecasting, Clustering, and Classification techniques for predictive and prescriptive modeling.

#### **Machine Learning:**

Pre-Modeling Tasks:

Proficient in essential pre-modeling tasks such as Data Wrangling, Feature Selection, Data Splitting, Data Scaling, and One-Hot Encoding. Specialized expertise in forecasting trends through

Supervised Machine Learning:

Applied skills in Regression and Classification techniques for various problem domains.

Unsupervised Machine Learning:

Experienced in implementing Clustering algorithms for unsupervised learning tasks.

Algorithm Evaluation:

In-depth understanding of algorithm evaluation, utilizing the Metrics module to assess model performance.

# **Functional Skills**

## **Statistics Proficiency:**

Expertise in analyzing data, validating analyses, and identifying fallacies and logical errors.

# **Analytical Skills:**

Advanced skills in researching and interpreting data, theorizing, and making accurate forecasts.

#### **Problem-Solving:**

Proven ability to generate innovative solutions for complex problems.

#### **Probing Skills:**

Adept at identifying and defining problem statements and desired outcomes.

# **Data Visualization:**

Skillful in creating clear and compelling visualizations to effectively communicate analysis results.

## **Hypothesis Formulation:**

Ability to formulate new hypotheses or research questions to drive data exploration.

# **Time Series Forecasting:**

comprehensive time series analysis.

## **Exploratory Data Analysis (EDA):**

Proficient in conducting EDA to gain valuable insights from complex datasets.

## **Regular Expression:**

Utilize regular expressions to streamline and enhance data wrangling processes.

# **Technical Skills**

#### **Statistical Analysis and Testing:**

Hypothesis Testing:

Extensive experience in various hypothesis tests, including one-way ANOVA, two-way ANOVA, independent-sample t-test, and paired-sample t-test and their underlying assumptions.

• Normality and Homogeneity Tests:

Proficient in conducting tests for normality (Shapiro-Wilk, Kolmogorov-Smirnov) and homogeneity of variance (Levene test) to ensure robust statistical analyses.

#### **Data Manipulation:**

Utilize Pandas and NumPy to efficiently manipulate and process data.

# **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.

# **PROJECTS**

#### 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.

- Supply Chain Analytics and Optimization with Python, SQL, and Microsoft Power BI.
- Customer Segmentation using K-Means Clustering with Python.
- Credit Card Fraud Detection using Machine Learning with Python.
- Breast Cancer Classification using Machine Learning with Python.
- Diabetes Prediction using Machine Learning with Python.
- Gold Price Prediction using Machine Learning with Python.
- Medical Insurance Cost Prediction using Machine Learning with Python.

# **COURSEWORK**

IBM Data Analyst Professional Certificate

Coursera, 2023