**Ahmed Ali** | Jersey City, NJ | +19735360699 | ahamedarafaath.ali@gmail.com | https://www.linkedin.com/in/ahamed-arafaath-ali/ |

Summary: Professional Engineer with over three years of experience in the Data Science field. Specialization: data visualization and analysis, machine learning, statistical modeling, big data analytics, and data pipelines.

### **EXPERIENCE**

## Data Scientist, OIE, NJIT, NJ, USA

January 2022 - Present

- Engaged in extracting records and loading them into a snowflake database by building ETL models supporting data governance and performing data analysis to identify trends and simplify findings for predictive analytics on 100K+ records.
- Reduced 60% of the time spent on data exploration for onboarding by initiating data modeling documentation supporting data architecture process emulating metadata, schema structure, and entity relation through the reverse engineering process.
- Modeled interactive dashboard for stakeholders providing performance insights using analytics tools (Tableau & Power BI) on results of data transformation and data extracts performed through building data pipeline and SQL querying.

# Graduate Research and Teaching Assistant, NCE, NJIT, Newark, NJ, USA

December 2021 - Present

- Led a research study for behavioral analysis by building statistical models emulating causal inference between 9 latent variables and 30+ collected metrics on survey data, presented observations and conclusion in a presentation and report using Microsoft PowerPoint.
- Partnered with professor and created course material for a statistics course and assisted a class of 20 students in comprehending the concepts through swift responses to their queries.

## Data Analyst & Scrum Master, BSE Consultants, Mosta, Malta

January 2019 – August 2021

- Slashed 30% of the cost by providing a cost-cutting solution through conducting data analysis using Microsoft Excel on historical data.
- Received a 95% satisfaction rate through implementing solutions addressing clients' requirements and corresponded in an agile manner.
- Delivered in a shortened life cycle of 2 years by managing and consulting with clients and contractors through providing efficient building services solutions based on data analysis conducted using similar projects for a building project valued at 2 million EUR.

### **PROJECTS**

## **H&M Personalized Fashion Recommendations** (Python, Recommender System, Deep Learning)

- Incorporated a recommender system for H&M customers containing a database of 1.4 million customers by recommending apparel based on their past purchases, utilized TensorFlow-Recommenders and Keras for model building.
- Devised recommendation model by feature engineering and incorporating deep learning models and dimensional embedding, engaged in boosting results by employing ensemble method combining models based on convolutional, sequential, and filtering models.

# Airline Performance Analysis Oozie Workflow (Java, Hadoop, Map-reduce, Big Data Analytics)

- Developed an Oozie workflow for a Map-reduce (Java Script) job for Airline performance analysis of data sized approx. 11 GB on an AWS virtual machine employing Hadoop fully distributed mode for effective big data analysis and Oozie for workflow management.
- Limited the program execution time by approximately 56% by increasing the number of VMs allocated for parallel processing.

# **House Price Prediction** (Python, Machine Learning, Regression Analysis)

• Built a machine learning regression model to predict the house price based on 81 different causal metrics, boosted MSE metrics up to 9% by performing data analysis, feature engineering, and hyperparameter tuning through grid search.

## **EDUCATION**

## **New Jersey Institute of Technology (NJIT)**

USA

MS in Data Science (GPA: 4.0/4.0)

 $September\,2021-December\,2022$ 

Courses: Machine Learning, Deep Learning, Data Mining, Statistics, Data Analytics, Quantitative Analysis, Database Management.

## **Kaunas University of Technology**

Lithuania

BS in Mechanical Engineering (GPA: 3.0/4.0)

September 2014 – June 2018

**University of Southern Denmark** 

Denmark

Exchange Semester (GPA: 3.0/4.0)

September 2017 – January 2018

### **SKILLS**

Programming and Tools - Python, SQL, Java, JavaScript, HTML, CSS, GitHub, Jupyter Notebook.

Frameworks and Packages - Flask, Scikit-Learn, TensorFlow, Keras, Seaborn, Matplotlib, NumPy, Pandas, SciPy, NLTK.

Cloud Infrastructure and Database Management - AWS, Microsoft Azure, MySQL, Microsoft SQL Server.

Data Engineer Skills – Airflow, Kafka, Oozie, Bash Shell Scripting, Hadoop, Map reduce, Big Data Analytics, ETL Modeling.

**Data Science Skills** – Exploratory Data Analysis on datasets, Machine Learning Techniques, Statistical Modeling, Data Visualization (Power BI, Tableau), Predictive Modeling, Statistical Analysis.