Faiyaz Ahmad

Dearborn, MI, USA | 313-632-1280 | faiyaza@umich.edu | github.com/faiyaz106 | linkedin.com/in/faiyaz106

Education

MS in Data Science, University of Michigan-Dearborn

Grade: 4.0/4.0

Expected Graduation April 2024

Coursework: Database Systems, Natural Language Processing, Artificial Intelligence, Applied Regression Analysis, Introduction to Big Data, and Deep Learning

Bachelors in Mechanical Engg., Motilal Nehru National Institute of Technology Allahabad Jul 2014-May 2018 **Technical Skills:**

Big Data Tools: Apache Spark, Spark SQL, Apache Airflow

Database: PostgreSQL, MySQL, NoSQL

Data Visualization: Matplotlib, Seaborn, ggplot, plotly, Tableau, Power BI

Cloud Tools: AWS SageMaker, AWS S3

Microsoft Tools: Excel, Word and Power Point

Project Tools: Git

Programming: Python, R, Matlab

IDEs: Atom, Anaconda

Data Analysis: Scikit Learn, Nltk, Tensorflow, Keras, Pandas, Numpy, REST APIs

Other Tools: Hypothesis testing, A/B testing, ANOVA, Statistical Analysis, Machine Learning, Deep Learning

Professional Experience

Team Manager, Engineering Hero MotoCorp Limited, Gujarat, India

Jul'18- Mar'22

- Developed a system for real-time data acquisition and analysis of vehicle acceleration testing that ensures 100% passing of the test before vehicle is dispatched.
- Designed and Implemented computer vision system to reduce rework of crankshaft sub assembly by 96% by identifying the components to prevent the wrong assembly.
- Project manager for setting up vehicle assembly line for 1000 vehicles per day, involved in project planning, scheduling, resource allocation, risk mitigation, and coordination with multiple teams and stakeholders to ensure the project completion within schedule and budget.
- Implemented 10+ process improvement ideas through data collection and analysis, leading to improved quality, productivity, and efficiency of the system and a cost savings of over 20000\$ per year.

Academic Projects

ETL pipeline for football leagues analysis (PySpark Spark SQL, HDFS, Football-API, Apache Airflow, AWS S3)

- Created a data pipeline for football leagues analysis, including data extraction, ingestion, transformation, and analysis.
- Built functional python script for data storage in S3 bucket. Orchestrated data pipeline using Airflow DAG.
- Developed the interactive Tableau dashboard for analysis of performance of teams and players in a particular league.

SOL Oueries performance evaluation (PostgreSQL, Indexing)

- Extracted the IMDB dataset from server, preprocessed, and created the ER diagram, DDL and DML statements.
- Created different analytical queries, and evaluated the performance of lookup queries with and without indexing.

Adult Income Class Classification (Scikit-Learn, Numpy, Pandas)

- Performed data preprocessing, exploratory data analysis, feature engineering, and balancing the unbalanced data.
- Trained classifier a logistic regression and random forest classifier for predicting the annual income class, achieved 0.66 F-1 Score and 0.88 ROC-AUC score.

Extractive Text Summarization (Python, Pandas, Nltk)

- Developed the text summarization by using the concepts TF-IDF and Centroid on CNN News Dataset.
- Centroid based approach is providing better central idea for given text and achieved the average 0.42 ROUGE-1

Handwritten digit recognition (Tensorflow, Keras, Pandas, Numpy)

- Trained Convolutional and Artificial Neural Network based classifier to predict the handwritten 28x28 pixel image.
- Achieved accuracy of 98% in CNN and 97% on ANN. Evaluated F-1 Score, Recall, Precision and confusion matrix.

Leadership and Volunteering

- 1. Volunteer at BuildOn Organization in University of Michigan-Dearborn: Raised \$300 USD at Carvinal Fundraiser event and provided the service for sorting the donated cloth at Auntie Na's Village.
- 2. Public relation coordinator in Culray 2015 cultural fest in MNNIT Allahabad: Coordinated for increasing the event exposure through different social media and local media platform.

Achievements and Certifications

- 1. Won Bronze Medal for completing 21 Kilometer half marathon in Vadodara in 2 hr 38 Minutes.
- 2. Won Shining Project award in Hero Motocorp for developing the acoustic chamber for 10dB Noise reduction
- 3. Machine Learning Certification -Coursera- Stanford University.
- 4. Neural Networks and Deep Learning Specialization Coursera- Stanford University.