Faiyaz Ahmad

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

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, Hadoop, 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: A/B testing, ANOVA, Statistical Analysis, Machine Learning, Deep Learning, Language Model

Professional Experience

Hero MotoCorp Limited, Gujarat, India [Automotive Manufacturing] Team Manager, Engineering Jul'18- Mar'22

Responsibility:
- Building data analytics solution, project management, drive sustainability, and process improvement projects in vehicle assy.

Data Analytics:
- Developed a monthly report and dashboard in Excel for capex expenditure, indirect tooling costs, and plant level KPIs.
- Designed data acquisition and analysis for vehicle acceleration testing, 100% ensured test passed vehicle will be shipped.
- Implemented a computer vision system to reduced rework of crankshaft sub assembly by 96% due to wrong assembly.
- For real-time productivity and quality data visualization, constructed data collection and analysis system for fuel tank testing.
- Created a Tableau dashboard of 500+ exports components for warehouse floor occupancy and infrastructure planning.
- Conceptualize the complete data collection pipeline for capturing cylinder block process parameters for traceability purpose.

Project Management:
- Project coordinator for setting up vehicle assembly for 1000 vehicles per day. Involved in project planning and execution.
- Coordinated with multiple department for successful installation and commissioning of 20+ new machines.
- Lead the implementation of 10+ sustainability, and process improvement projects, result in saving of $20,000/year.

Academic Projects   Aug'22- Jan'23

ETL for Football Leagues Analysis and Prediction
- Built python script for data extraction through football API and storage in AWS S3 bucket.
- Performed the data modeling by using Spark and Spark SQL. Orchestrated data pipeline using Airflow DAG.
- Built Tableau dashboard and trained the deep learning model for predicting upcoming matches.

Parts of Speech Tagging
- Implemented Viterbi algorithm for parts of speech tagging for each word in a sentence using Penn Treebank datasets.
- Achieved 92.3% accuracy on test set using Viterbi algorithm and 85.18% accuracy for assigning most frequent tag.

Word Sense Disambiguation
- Applied Naïve Bayes algorithm for identification of correct sense of particular word in given context.
- Created a bag of words, implemented 5 fold cross validation, achieved 90.18% accuracy on 'bass' dataset.

Extractive Text Summarization
- Developed the text summarization by using the concepts of text rank , tf-idf, and centroid on CNN Datasets
- Achieved 0.56 Rouge-1 score using text rank undirected graph technique. Least Rouge-1 score achieved 0.18 using tf-idf.

Handwritten digit recognition
- 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
- Raised 300$ and provided the 3 hours community services for Buildon UM-Dearborn club.
- Public Relation Coordinator in culrav-2015 fest at Mnnit Allahabad, increased the fest exposure through different media.

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