Syed Affan Daimi

saffand03@gmail.com | LinkedIn | **Medium** | +91-9390456483

Education

B. Tech., Muffakham Jah College of Engineering and Technology (Osmania University) – Hyderabad,India   2020 – 2024
Coursework: Database Management Systems, Finance & Accounting, OOPS Using Java, Operations Research, Data Structures and Algorithms, Digital Electronics, Mathematics, Programming For Problem Solving, Engineering Physics

B.S., (Part-Time) Indian Institute of Technology Madras – Chennai, India
- **Diploma In Data Science**   Graduated 2023
  Projects: Modelling E-commerce Shopper's Behaviour (Machine Learning Practice), Goods Quality Prediction and Creditors' Returns Forecasting (Business Data Management)
- **Diploma In Programming**   Graduated 2024
  Projects: Designing Database and Frontend Application for Library Management System

Professional Certifications: Azure AI Fundamentals **[AI-900]**, Azure Data Fundamentals **[DP-900]**,
Power Platform Fundamentals **(BI) [PL-900].**   Microsoft Azure

Experience

Data Science Intern, Razor Group GmbH – Remote, India   2023 – 2024
- **Forecasting, Demand Planning and Portfolio Steering:** Designed **Machine Learning** clusters to divide the company portfolio based on long term **time-series** features of the product sale trends to improve the true positive rate and reporting accuracy of the demand forecasts by ~20% and assist in effective portfolio steering.
- Worked on explainability of black-box forecasting models, utilizing and presenting **SHAPely** and model plots to stakeholders, resulting in problem identification of irrelevant features, model cross-learning and sensitivity.
- **Competitor Intelligence Database:** Built a database with 500,000+ competitor products identified and periodically tracked by writing custom **python** scripts uploaded on **AWS Lambda**.
- Collaborated and brainstormed closely with the operations team to understand business requirements, designed the database and performed transformation of extracted data using **SQL** to be utilized in business intelligence dashboards.
- **Demand Plan Reporting:** Reported on the accuracy of demand plans, resulting partly in company migration of AWS forecast to custom Machine Learning solutions.

Research Intern, Indian Institute of Technology Hyderabad, with Dr. Krishna Mohan – Hyderabad, India   2023
- **Implementation of Object Detection Techniques to Improve Self Driving Cars:** Worked on a dataset of 19,800 radar frames, synchronized camera images, and labels, concurrently performing **object detection** and **multi-label classification**, with a focus on capturing six key object categories: pedestrians, cyclists, cars, motorbikes, buses, and trucks.
- Evaluated performance of dataset on 7+ **computer vision** backbones, performing finetuning, reported a best f1-score of ~60%. Further, utilized a custom **VIT** (transformer) based architecture to improve the f-1 score to ~71%.

Publications

- **Syed Affan** and Asma Iqbal. *Ensemble Machine Learning to Predict and Feature Engineering to Identify Factors for Academic-Success. (*Presented at Springer International Conf. on Advances in Computer Eng. and Communication Sys.)
- Asma Iqbal, **Syed Affan** et. al. *Performance Efficient and Fault Tolerant Approximate Adder* (Published in the Springer Journal of Electronic Testing: Theory and Applications)   0.1007/s10836-023-06092

Projects

Goods Quality Prediction and Creditors' Returns Forecasting for Pharmaceutical Company (supervised by Dr. Aaditya Chandel and Dr. Ashwin J. Baliga)
- Collected and cleaned data of Goods Returns' to predict the duration for the retrieval of faulty medicines by sellers, creating a **regression** model. This resulted in better decision making for inventory management by the shopkeeper.
- Conducted **statistical tests** to measure creditor trustworthiness uncovering tendency of non-business creditors to default.

Verdure
- Curated a dataset of 85k from 45K images using image augmentation to train and deploy a **PyTorch** model capable of detecting plant health and created a front facing interface using **Streamlit**.
- Worked in a 4 person team to integrate **IOT** components and create an Android App for all plant based needs. Secured 1st place in Envisage 2023, hosted by Computer Society India, competing against a field of 200+ participants