ALAHARI VIRINCHI

Amherst MA | (720) 203-5660 | valahari@umass.edu | LinkedIn | GitHub

EDUCATION

Master of Science in Business Analytics

University of Massachusetts Amherst - Isenberg School of Management

Bachelor of Technology in Electronics & Communication Engineering

CVR College of Engineering

2023 - 2024

Amherst, MA 2017 - 2021

Hyderabad, India

EXPERIENCE

Product Engineer | Temenos AG

July 2021 - August 2023

- 87% optimization in operational efficiency by automating the manual microservice update process into a pipeline, reducing the time required from 32 hours to 4 hours for each release.
- Achieved 75% savings on cloud infrastructure costs by designing and automating the deployment of a fully functioning cost-effective testing environment deployment through a pipeline, reducing daily expenses from 1600 to 400 Euro.
- Implemented Disaster Recovery plans and collaborated with Project Management to analyze issues, perform root cause analysis, and implement enhancements across the product's end-to-end pipeline.
- Built and deployed Azure function apps, DB Servers, Namespaces, AKS (Kubernetes) Cluster, Virtual Machines, Microservices, and other Azure resources using ARM templates and ADO Pipelines.

ENTREPRENEURIAL EXPERIENCE

Lead Designer, Volunteer | Digital Equity Foundation (NGO)

December 2021 – September 2023

- Launched an internship campaign, attracting 1,500 applications from colleges in remote villages, showcasing broad outreach.
- Achieved 30% increase in engagement and awareness of the NGO's mission and initiatives through executed multimedia campaigns.
- Utilized data-driven design strategies, contributing to a 25% improvement in the effectiveness of visual communication materials.
- Designed, developed, and maintained the organization's website as well as social media pages using Wix & Adobe Creative Suite.

SKILLS

- Programming Languages: Python, R, Java, SQL (DML, DDL), Bash, VBA
- Tools: Advanced MS Excel, Tableau, Power BI, RStudio, Airflow, Microsoft Azure, Google Data Studio, Looker Studio, SAP, MS Office 365
- Data Management: Data Mining, Machine Learning Algorithms, ETL/ELT, CI/CD, Predictive Analysis, Regression & Classification Techniques.

ACADEMIC PROJECTS

Flight Delay Prediction | Python, ML Models

- Exploratory Data Analysis (EDA) leveraging Python visualization using NumPy & Pandas to identify metrics for feature selection.
- Developed a Multiclass classifier achieving 98% accuracy and 95% recall determining if a flight is cancelled or delayed or on time.
- Built a Multilabel classifier predicting delay reasons with 85.1% accuracy and 8% Hamming loss by using seaborn library.
- Predictive model using polynomial regression and regularization, improving R-squared from 0.3 to 0.82 and reducing MAPE to 0.4.

Sonar (Rocks vs. Mines) | Python, Regression Models

- Conducted exploratory data analysis on SONAR data using sci-kit, examining 61 determining factors for rock and mine detection.
- Enhanced model through feature engineering techniques like scaling and selection, achieving an R-squared value of 0.85.

Social Distancing Monitoring | Python, OpenCV

- Developed a Deep Learning Model with YOLOv3 for Social Distancing monitoring. Utilizing YOLO optimizes runtime, maximizing Frames Per Second (FPS) in live inferencing without compromising accuracy significantly.
- Calculating the distance between the people on the screen using Euclidean distance and give total number of social distancing alerts if they are closer than 50 meters.

Humanoid Robot | Python, OpenCV

- Developed a 17 DOF humanoid robot with OpenCV image processing for both autonomous and user-commanded operations, utilizing a Raspberry Pi along with an Arduino Bluetooth/USB Servo Controller.

Pokémon EDA | Excel, Data Visualization

- Used BeautifulSoup to web scrape and leveraged Advanced Excel techniques, including pivot tables, VLOOKUP, and SUMIFS, to analyze various parameters such as attacks, defense, and speed of Pokémon characters and populated a comprehensive Pokédex.
- Analyzed trends focusing on the behavior of legendary Pokémon across different seasons to identify patterns and correlations.

AWARDS

- Awarded with "Temenos Infinity Star" for the contributions made towards release time optimization and reducing the overall infrastructure expenses significantly.