VIGNAN VENNAMPALLY

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EDUCATION

Northeastern University Boston, USA
Master of Science in Data Analytics Engineering, (GPA: 4.0/4.0) Expected May 2023
Course Work: Machine Learning, Natural Language Processing, Deep Learning & Neural Networks, AWS Cloud

Indian Institute of Information Technology Jabalpur, India
Bachelors in Electronics and Communication Engineering, (GPA: 7.6/10.0) Jul 2020

PROFESSIONAL EXPERIENCE

AstraZeneca Boston, Massachusetts
Data Science Co-op Jun 2022 - Dec 2022

- Collaborated with 10+ Cross - Functional Team members to develop **Machine Learning** (XGBoost, RF, LightGBM), **Deep Learning** (ANN) techniques in **Python** that identified 300 Potential physicians with 92% AUC Score.
- Built **Prescriptive, Predictive Modeling** techniques that achieved early diagnosis of 200 Potential Patients reducing Time to Treatment Initiation by 40%.
- Analyzed **1TB IQVIA LAAD** Data in **Snowflake** using 100+ **SQL** Scripts that identified 18 Key Performance Indicators (KPIs) of therapy initiation.
- Developed in-house Data Capabilities, reducing vendor dependency by 80% and effectively **communicated** insights to technical and non-technical team members.

Ericsson Bangalore, India
Data Science Engineer Aug 2020 - Aug 2021

- Centralized ML & AI tasks by deploying a highly scalable **Dataiku** DSS application across 3 **AWS** Environments achieving a 30% increase in Data Processing time.
- Operationalized 2 Machine Learning from Development to Deployment projects saving 100+ hours monthly.
- Improved **AWS EC2** Performance by 15% through **Linux** Scripting that automated memory, log management tasks reducing manual intervention by 40%.
- Resolved 100+ Production Issues through Monitoring & Maintaining Production Environments that increased the bug resolving capacity by 10%.

R3 Media Labs Kanpur, India
Data Scientist May 2019 - Nov 2019

- Developed a **Predictive Model** for customer churn using XGBoost that increased platform revenue by 20% and Customer retention by 15%.
- Conducted Extensive Analysis on 100GB of member data from **MySQL**, **MongoDB** databases revealing Customer behavioral patterns leading to 10% increase in User Engagement.
- Improved Time-to-insight by 20% through redesigning dynamic data visualization of 400 member data using **Tableau**.

RESEARCH EXPERIENCE

Deep Learning Research Assistant - Face Detection in Image/Video

- Tracked Infants breathing & sucking rates through 2 different Face Detection Methods that use concepts of integral Image, Attentional Cascade, Bounding boxes, Non-Maximum Suppression techniques.
- Improved Model performance to 92% accuracy through multi-cascade Deep Learning Neural Networks.

NLP Research Assistant - Twitter Sentiment Analysis

- Extracted & Analyzed tweets from 5 different airlines using Twint & NLP techniques (Stemming, Lemmatization).
- Identified top 10 reasons for Negative Sentiment & most common words from Negative tweets that improved strategic decision making.

Community Detection in Complex Graph Networks

- Implemented Travelling Salesman Problem to understand the working mechanism of Ant Colony Optimization.
- Optimized the most advanced algorithm in community detection using Modularity Optimization technique.

TECHNICAL SKILLS

Programming: Python (Pandas, NumPy, Scikit-learn, SciPy, Seaborn, Matplotlib, TensorFlow, Keras, PyTorch), R, SQL, C
Data Engineering & Databases: ETL, Hadoop, Hive, Apache Spark, MySQL, MongoDB
Tools & Technologies: Azure, AWS, Linux, Power BI, Docker, Kubernetes, Git, Tableau, Excel
Modeling: Machine Learning (Clustering, Classification, Recommendation), Deep Learning, NLP, Statistical Modeling