

AYYAPPA SUMANTH BHUMA

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EDUCATION

Syracuse University

Master of Science, Applied Data Science

Syracuse, NY

August 2021 - December 2022

Coursework: Applied Machine Learning and Deep learning, Business and Financial Analytics, Statistical Inferencing, Quant Reasoning, Natural Language Processing, Text Mining, Big Data Analytics

Indian Institute of Technology

Bachelor of Technology, Computer Science

Jodhpur, India

July 2015 - May 2019

PROFESSIONAL EXPERIENCE

CodersData | Contract Data Analyst

July 2022 - December 2022

Developed and implemented data analyses and collection systems to optimize statistical efficiency and quality. Working in the growth team, created metrics for several funnels and deployed dashboards to track them.

Accomplishments:

- Contributed to the success of marketing campaigns by building a metrics pipeline to analyze campaign success.
- Increased efficiency and productivity by automating several tasks using Airflow.

Tech Mahindra

Data Scientist

July 2020 - August 2021

Designed, developed, and implemented predictive models using advanced data mining and machine learning techniques. Collaborated with cross-functional teams of data scientists and engineers to experiment and implement innovative ML/AI solutions. Effectively communicated complex concepts and analysis results through creative visualization to stakeholders of varying technical levels.

Accomplishments:

- Delivered a Text Normalization model for a Text to Speech (TTS) system, utilizing transfer learning with Google's Sparrowhawk model. This resulted in a significant 15% increase in TTS system accuracy.
- Designed and implemented a phone call classification system for a healthcare provider, resulting in a significant reduction in response time. This streamlined process improved overall efficiency and enhanced customer satisfaction.
- Delivered a robust machine learning model to a credit card company, which enabled them to mask sensitive information from their text data.

Software Engineer (Python developer) | Zen3 Tech

July 2019 - July 2020

Contributed to the development of Sayint, a speech analytics product providing insights on conversational data. Specifically, played a key role in deploying language models and machine learning models by developing APIs and Docker. Responsible for maintaining and developing a language database comprising over 10 languages and adding key database connections to data pipelines.

SKILLS

Technologies and Tools: Python (NumPy, Pandas, Matplotlib, sci-kit, SciPy, NLTK, TensorFlow, Keras, Pyspark), R, C++, Tableau, Flask, Celery, Docker, Airflow, Bash, Git, DBMS

Analytics: Descriptive and Inferential Analytics, Hypothesis Testing, A/B Testing, Exploratory Data Analysis (EDA), Feature Selection, Text Mining, Web Scraping, Statistical tests, Business and Financial Analytics, Bigdata (HDFS, Map-Reduce, Apache Spark)

Machine Learning: Regressions, Decision Trees, Clustering, Random Forests, Support Vector Machines (SVM), K-Nearest Neighbours (KNN), Bayesian Methods and Naïve Bayes Classifier, Natural Language Processing (NLP), Deep Learning (CNN, RNN, LSTMs)

PROJECTS

Detecting Misogyny in Text

SU, Fall 22

- SemEval 2023 task to detect sexism in sentences and to explain it. Built neural network architecture by transfer learning and fine tuning the BERT uncased model
- Developed an unsupervised method utilizing BERT Topic modeling to sub categorize the type of misogyny in sentences

NBA player Analysis with Pyspark

SU, Fall 22

- Leveraged the capabilities of pyspark to process NBA players data of over 25 seasons.
- Constructed a Random Forest model to analyze player performance and used it to track changes in feature importance across multiple seasons of NBA.

Attention Network - Identifying fake news articles

SU, Spring 22

- Constructed a classification system to detect fake news from a list of news articles; Built Bidirectional LSTM and attention-based LSTM models for the classification