Jashia Mitayeegiri

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Education

UNIVERSITY OF NORTH TEXAS, DENTON, TEXAS, USA **EXPECTED May 2024**
Engineering Masters in Artificial Intelligence (Machine Learning Concentration) **GPA: 4 / 4**
Courses: Machine Learning, Deep Learning, Natural Language Processing, Feature Engineering, Big Data, Data Science, Empirical Analysis

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD, INDIA **AUG 2022**
Master of Technology in Computer Science **GPA: 9.40 / 10.0**
Courses: Soft Computing, Web mining, Data Analytics, Advanced Data Structures, Information Retrieval System, Mobile Application Development.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD, INDIA **AUG 2021**
Bachelor of Technology in Computer Science **GPA: 8.22 / 10.0**
Courses:Data Warehousing and Data Mining, Grid and Cloud Computing, Machine Learning and Pattern Recognition, Design & Analysis of Algorithms

Skills

PROGRAMMING LANGUAGES: Python, Java, C, MATLAB, SQL, Json.
BIG DATA PROCESSING: Apache Kafka, Apache spark, Hadoop, mongoDB, zookeeper, azure, AWS, GCP, MySQL.
WEB TECHNOLOGIES: HTML, Servlets, JSP, CSS, XML, Json, JavaScript, Django.
LIBRARIES: NLTK, TensorFlow, PyTorch, PySpark, LangChain, Hugging Face, Scikit-Learn, NumPy, Pandas, Matplotlib, Seaborn, SciPy, SpaCy,

Academic Projects

REAL TIME YOUTUBE DATA ANALYTICS USING APACHE KAFKA STREAMS

- Used Kafka streams and zookeeper to get the videos data using YouTube API by initiating the Kafka producer and the sink to be mongoDB for downstream consumption and identified the top 10 videos categories with highest uploaded videos.
- Within a window of 60 minutes the topics with the highest uploaded videos, likes and views are analyzed and plotted using the Kafka consumer stream.

VISION TRANSFORMERS FOR EMOTION RECOGNITION:

- Developed and implemented a vision transformer model with multiheaded attention for highly accurate human emotion recognition, achieving a 94% accuracy rate.
- Demonstrated strong expertise in leveraging attention mechanisms and positional encodings for improving the model.

IMAGE CAPTION GENERATOR AND COMPARATOR USING RNN AND WORD2VEC:

- Engineered a merger model architecture to generate captions using Inception-v3 model for image feature extraction and LSTM for latent pattern extraction in image descriptions, employing word2vec for caption vectorization and image similarity measurement.
- Attained outstanding results with a BLEU-1 score of 0.91, BLEU-2 score of 0.85, and an average similarity score of 0.87, showcasing proficient development of image captioning and similarity analysis techniques.

OPTIMIZATION OF RIDE SHARING APPLICATION WITH REINFORCEMENT LEARNING:

- Designed and implemented a Markov Decision model using Value Iteration Technique to optimize ride paths, resulting in efficient and optimal decision-making.
- Utilized data visualization to illustrate the optimal policy for each ride episode, effectively maximizing rewards with a discount factor of 0.8.

Internships

MACHINE LEARNING INTERN – PREDICTIVE DATA SOLUTIONS **AUG 2021 – JAN 2022**
Worked on producing a software facilitating decisive business decisions by quantifying topic similarities and dependencies using NMF topic modeling, Word Embedding, Sentence Transformers, DBSCAN, and tSNE during internship at Predictive Data Solutions.

MACHINE LEARNING INTERN – OSMANIA UNIVERSITY, HYDERABAD, INDIA **MAY 2021 – JULY 2021**
Under MoU between Indian Space Research Organization and NERTU-OU for the 'Speech Technologies for Humanoid' Project

- Developed 3 types of chatbots which are based on context, TF-IDF, Word2Vec.
- Word2vec chatbot with a 94% accuracy and accelerated response time from 0.10 sec to 0.04 sec.
- Revitalized it with entity and intent extraction, abbreviations detection, phrase collection.

INTERN – WOMEN SAFETY WING, TELANGANA STATE POLICE **OCT 2021 – NOV 2021**
Contributed to report writing and analysis while conducting research on state-of-the-art computer vision models for the Missing Person Monitoring Cell. Explored models to aid in solving crimes pertaining to women and children.

Publications and Articles

- Mitayeegiri Jashia. Machine Learning Based Transfer Learning for Recognizing Face in Disguise. Design Engineering, 6 Jan. 2022., p. 13684 – 13693.
- Article on Latent Semantic Analysis (www.geeksforgeeks.org/latent-semantic-analysis/)

Extracurricular Activities

IEEE JNTUHCEH STUDENT BRANCH CHAIR (JUNE 2021- JUNE 2022)
Implemented engagement strategies leading to a 20% increase in membership participation and successfully organized an industry collaboration event fostering networking opportunities for engineering professionals and students.