Alluri Niharika Reddy

Proficient in Natural Language Processing (NLP), Data Analysis, Python, Machine Learning, and Deep Learning, with over 5 years of hands-on experience. Skilled in end-to-end deployment of machine learning solutions.

EXPERIENCE

Machine Learning Engineer - Jocata Financial Advisory & Technology, Hyderabad
December 2020 - Present

- Developed a cutting-edge Bank Statement Analyzer leveraging LLM's for classifying transactional data into 90+ categories and extracting entities; enhancing financial analysis accuracy by 40% and reducing manual effort by 60%.
- Optimized GPU memory usage with ONNX compression technique, resulting in a 40% reduction in memory footprint and enabling efficient deployment of BERT, T5, and NER models for real-time inference.
  Skills: BERT, T5, FastAPI, ClickHouse(database), Pytorch, Torchserve, NER
- Created and deployed Chatbots for internal products using Rasa and ChatGPT, resulting in a 40% reduction in support time.
  Skills: RASA, OpenAI(ChatGPT), LangChain(RAG)
- Conducted text analysis and built an ensemble model for name matching, reducing false positives by 82% and an international address parsing model for the same product.
  Skills: MySQL, Name matching algorithms, Random Forest, FastAPI, Docker
- Used model interpretability techniques (Shapley) to generate auto comments and enhance the understanding of prediction which in turn added 3% revenue to the product.
  Skills: Shapely, T5

Data Analyst - AppCloud Software Solutions Pvt Ltd,Hyderabad
July 2018 - Oct 2020

- Gathered data from numerous salons and delivered insightful visual analyses to clients through the application, driving a 10% boost in revenue.
  Skills: MySQL, Plotly, Pandas, Python, Django.
- Implemented clustering techniques(HDBSCAN and K-means) for precise customer segmentation, driving effective targeted marketing campaigns and a substantial 19.3% reduction in marketing costs.
  Skills: MySQL, Python, Clustering(K-means), Django.
- Applied NER extraction techniques to capture insurance applicant data into Excel and subsequently conducted data analysis for valuable insights.
  Skills: Spacy, MySQL

ML Data Associate - Amazon India (ADS), Hyderabad
August 2017 - June 2018

- Responsible for labeling and annotating data to improve Alexa's Automatic Speech Recognition and Natural Language Understanding.

Phone: +91 9100654318
E-mail: niharikareddy2494@gmail.com

SKILLS

Python: Numpy, Pandas, Scipy, Jupyter, Flask, FastAPI, Django, MongoDB, MySQL, Data Structures and Algorithms.

Machine Learning: Supervised and Unsupervised Algorithms, Scikit-learn, Exploratory Data Analysis, Data Processing, Data Cleaning, Feature Extractions, Deployment using Flask and Django API's

Deep Learning: Neural Networks, NER, LSTM, RNN, TensorFlow & Keras, PyTorch, Spacy, Word2Vec, Gensim, NLTK, Transformers, Transfer Learning using LLM's such as BERT, T5, Optimization Techniques, Generative Modelling, RASA, LangChain, NLU

Data Visualization: Matplotlib, Seaborn, Plotly and Tableau

Additional Skills: Docker, Kafka, ONNX, TorchServe, Azure ML, Linux, Statistics, Probability

Soft Skills: Effective communication, Teamwork,Problem solving, Critical thinking.

EDUCATION

VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad- EIE
September 2012 - May 2016

PERSONAL PROJECTS

- **Localization of a sentence using WordVectors:**
  Using NLP word vectors in a novel way to solve a real world problem which is adopting a product to multiple countries.
  Skills: Gensim, Word2Vec

CERTIFICATIONS

2020 Jan-Oct- **Data Science Specialization Course** from Upx Academy by Tech Mahindra

ACHIEVEMENTS

- Spot Award – Jocata, 2021

- Star Performer – Amazon, 2018