HARI SANKARA KOTESWARA LAL KELUTH

+1 (940)-843-7985 ⋄ harisankara.keluth@gmail.com ⋄ LinkedIn | Github | **WILLING TO RELOCATE**

PROFESSIONAL EXPERIENCE

Machine learning Engineer | Cadential Technologies Pvt Ltd | India   **Jan 2022 - Jul 2023**

- Built a high-performance **matching algorithm** using **PySpark, Elasticsearch, and fuzzy logic** (Jaro-Winkler) to process **6.4M records**, improving data consistency via **master data management**.
- Developed and deployed **advanced machine learning models** for real-time inference, leveraging **Python, TensorFlow, PyTorch, and Scikit-learn**.
- Built and optimized **NLP-based search and recommendation systems** using **BERT, GPT, and Transformers**, improving search accuracy by 35%.
- Designed and implemented **scalable deep learning pipelines** for image recognition and text classification using **CNNs, RNNs, and attention models**.
- Led the deployment of **production-grade ML models** with **MLOps best practices**, utilizing **Docker, Kubernetes, CI/CD, and AWS**, while conducting **A/B testing and hyperparameter tuning** to optimize model accuracy and improve business-critical predictions.

AWS Cloud Intern | AICTE | India   **Oct 2021 - Dec 2021**

- Optimized **ETL workflows** using **AWS Glue, S3, Redshift, and Lambda**, improving data ingestion and transformation efficiency.
- Built and deployed **ML models** with **AWS SageMaker, AutoML, and EC2**, while designing cloud-based **data pipelines** using **AWS Data Pipeline, Athena, and DynamoDB** for scalable training and efficient data processing.

PROJECTS

ChatPDF Using Retrieval Augmented Generation (RAG) (GPT-3.5, FAISS, Hugging Face, OpenAI, NLP)

- Built an AI-driven PDF tool using RAG for semantic search and content extraction.
- Applied FAISS indexing and GPT-3.5 Turbo to improve retrieval accuracy and response quality.

Classification of Diabetic Retinopathy Using ResNet (TensorFlow, Keras, OpenCV, Deep Learning)

- Built a deep learning model using ResNet, leveraging TensorFlow and Keras for high-accuracy retinal image classification.
- Applied advanced image processing with OpenCV and feature extraction techniques to optimize classification accuracy.

A Deep Hybrid Learning Model for Code-Mixed Text (LSTM, CNN,PyTorch, NLP)

- Engineered a hybrid deep learning model combining LSTM, CNN, and Adaptive Boost for bilingual text classification.
- Utilized NLP techniques, preprocessing, and ensemble learning to improve classification on social media datasets.

Text-to-Animation Generator (Python, VQGAN, CLIP, React, AWS)

- Built an AI-driven animation system using VQGAN and CLIP to transform text into dynamic visuals.
- Developed an interactive UI with React and integrated a Flask backend for seamless text input and video generation.

SKILLS

- **Machine Learning & AI:** Deep Learning, NLP, Computer Vision, **LLMs**, **RAG**, TensorFlow, PyTorch, Scikit-learn.
- **Data Engineering & Big Data:** SQL, MySQL, MongoDB, Snowflake, **ETL**, **Data Pipelines**, Hadoop, PySpark.
- **Cloud & MLOps:** AWS (Glue, Redshift, EC2, SageMaker, Lambda), GCP (**BigQuery, Dataflow, Vertex AI**), **CI/CD**, Kubernetes, Docker, Terraform
- **Software Development: Python**, Java, C, React.js, Flask, Node.js, REST APIs, GraphQL, **Model Deployment**.
- **Data Analytics & Optimization:** Tableau, Power BI, **Feature Engineering**, **A/B Testing**.

EDUCATION

University of North Texas | MS in Computer and Information Science   **Aug 2023 - May 2025**
GPA: 3.6/4.0

VR Siddhartha Engineering College | BTech in Computer Science Engineering   **July 2019 - July 2023**
GPA: 3.5/4.0