Jagaadhep U K

+91 63821 50416 — ukjag2000@gmail.com — github.com/UKJaagadhep — linkedin.com/in/jagaadhep-u-k

Education

Amrita Vishwa Vidyapeetham, B.Tech in Computer Science and Engineering October 2022 – April 2026

Skills

Programming Languages: Python, Java, C/C++

Machine Learning/NLP: Scikit Learn, TensorFlow, PyTorch, HuggingFace, LangChain, ONNX

Computer Vision: OpenCV, Ultralytics, Mediapipe, Albumentations

Cloud/MLOps: AWS, Weights And Biases

Databases: MongoDB, MySQL, Pinecone, ChromaDB

Web: FastAPI, Streamlit, HTML, CSS

Internship

AI Intern, Davnix Tech, Bengaluru

November 2024 - Present (Remote)

- Developed NamNews, an AI news reporter for Kannada e-newspapers.
- Segmented articles with LLaVA, achieving 95% IoU and F1-score of 0.92.
- Performed OCR extraction using Tesseract, obtaining a CER of 7% and WER of 9%.
- Summarized extracted text with mBART and converted summaries into human-like speech using gTTS for audio output with a WER of 8%.

Projects

Human Emotions Detection

- Developed a CNN model for emotion classification with a dataset of 9,000 augmented images.
- Implemented LeNet, ResNet34, VGG16, and EfficientNet to optimize performance.
- Achieved 89.54% accuracy, using GradCam and Tensorboard for interpretability.

Named Entity Recognition with RoBERTa

- Preprocessed and tokenized the CoNLL 2003 dataset of 20,000 annotated sentences with Roberta-TokenizerFast.
- Fine-tuned the roberta-base model, achieving 98.62% accuracy, 93.56% precision, 95.02% recall, and 94.29% F1-score.

Medical Chatbot using RAG

- Built a RAG-based chatbot using LangChain's RetrievalQA chain and Pinecone for embedding storage and retrieval.
- Converted *The Gale Encyclopedia of Medicine* into embeddings with sentence-transformers/all-MiniLM-L6-v2 and implemented real-time medical query resolution with Pinecone.

Achievements

1st Position — ML Hackathon, Amrita Vishwa Vidyapeetham, March 2024: Developed a disease classification model with 95.49% validation accuracy, deployed using Streamlit.

2nd Position — AI/ML Hackathon on Road Safety, IIT Roorkee, January 2024: Built a real-time accident detection model with 88.78% accuracy, integrated with Twilio and Geoapify.

3rd Position — Mythodata Hackathon, IIIT Sricity, March 2024: Created and deployed a cricket score prediction model, achieving a MSE of 25.34.

AI Domain Mentor — Cognizance, Amrita Vishwa Vidyapeetham: Mentored 50+ students, presented 2 open mics, and organized Tantrotsav 2024.