UMANGI NIGAM

Software Development Engineer

+91-7068716124 | nigamumangi@gmail.com | www.linkedin.com/in/umangi-nigam | github.com/Umanginigam | leetcode.com/u/umanginigam

Detail-oriented and enthusiastic Computer Science student with expertise in web development, AI/ML, and data analysis. Seeking a role to apply my technical and problem-solving skills in building innovative solutions that deliver real-world impact

.

PROJECTS

Mindly (https://github.com/Umanginigam/Mindly) **Oct 2024-Nov 2024**

- Developed an AI-powered mental health assistant with emotion detection using the DistilRoBERTa model.
- Integrated GPT-2 transformer to generate empathetic responses tailored to user emotions.
- Technologies: Python, Hugging Face Transformers, Flask, HTML,CSS, JS,BERT

Aerospectra (https://github.com/Umanginigam/Aerospectra) **Aug 2024- Sep 2024**

- Built an AI/ML platform to generate fine spatial resolution air quality maps focusing on NO2 concentrations.
- Analyzed 250+ satellite images, achieving 84% accuracy with a Random Forest model. Implemented cloud handling techniques, improving accuracy by 20% in cloudy regions.
- Technologies: Python, TensorFlow, Flask, React.js, Folium,HTML,CSS, JS

Agritech (https://github.com/Tusharedith/Agritech) **Feb 2024-Mar 2024**

- Crop Prediction: Suggested the most suitable crops to plant based on environmental factors.
- Crop Yield Prediction: Estimated potential yield to assist in planning and resource management.
- Disease Analysis: Identified crop diseases from images and recommended treatments.
- Fertilizer Recommendation: Recommended optimal fertilizers based on soil and crop factors.
- Achieved 85% accuracy in predictions and disease detection.
- Technologies: HTML, CSS, Flask, TensorFlow,Streamlit

SilentBond (https://github.com/Umanginigam/Silent-Bond) **Nov 2023-Dec 2023**

- Real-time sign language gesture detection with 90% accuracy and 5ms latency.
- Technologies: Python, OpenCV, Keras, Streamlit

EDUCATION

Bennett University **Sep 2022-June 2026**

Bachelor of Technology in Information Technology
CGPA:8.2

SKILLS

- Frontend-HTML, CSS, Javascript (React)
- Backend-Python(Django, Flask), Node.js, MongoDB,MySQL
- Machine Learning(Scikit- learn, TensorFlow, Keras. OpenCV)
- Deep Learning-CNN, BERT
- DSA(C++)

ACHIEVEMENTS

- Qualified for Smart India Hackathon(College level).
- Published a research paper on underwater waste detection using high-performance computing in [Jaypee Solan].
- Currently writing a demo paper on a chatbot with emotion detection for submission.
- Preparing a conference paper on hate speech detection in Hinglish for presentation.