

Nukaraju Neradabilli

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Career Objective

As a passionate software engineer with expertise in NLP, AI, ML, I am proficient in Python. I have hands-on experience in speech processing, AI applications, and problem-solving using data structures. And explored cloud platforms. I am eager to tackle complex challenges and contribute to innovative projects.

Technical Skills

Full-Stack Development: HTML, CSS, Bootstrap, JavaScript, Flask, RestAPI

Programming: Python (proficient), Java, C, SQL, Data Structures and Algorithms (DSA)

NLP: NLTK, SpaCy, Gensim, Transformers, LLMs, Generative AI, Tokenization, Named Entity Recognition (NER), Sentiment Analysis, Topic Modeling, Text Classification, Word Embeddings

Machine Learning & Deep Learning: TensorFlow, Keras, PyTorch, Scikit-Learn, NumPy, Pandas, Seaborn, Matplotlib, Regression, Classification, Clustering, Neural Networks, Decision Trees, Random Forests, SVMs

Cloud Platforms: AWS EC2, Azure ML Studio **Developer Tools:** VS Code, GitHub, Git

Professional Experience

Research Intern | Speech Processing Lab | IIIT Hyderabad

Jul 2024

- Worked with ASR, VITS TTS, pydub, WhisperX, focusing on prosody manipulation for natural tone and utilizing BERT for NLP tasks.

ML Engineer Intern | Trizen Ventures LLP | Visakhapatnam

Feb - Jun 2024

- Executed data scraping with Python to categorize and analyze top-performing stocks and mutual funds by sector.
- Developed AI/ML solutions using Siamese networks, LSTM, BERT, and GPT models with technologies like OpenAI, WhisperX, Nvidia NeMo, and Pyannote for advanced emotion and voice analysis.

ML Project Intern | Enlignce Technology Labs | VIT Bhimavaram

May-Dec 2023

- Developed an **automated grading system** using **speech recognition** and **NLP**, integrating **WhisperX Speaker Diarization** and top Whisper models. Assessed responses with **GPT-3.5-turbo** and evaluated performance using MAE, RMSE, and Pearson Correlation

Projects and Research

Job Market Analysis Tool using live data from Naukri.com

[Source Code](#)

- Developed a **Flask** application offering insights into job demand, salary predictions, and skill enhancement, utilizing **Selenium** for scraping Naukri.com job postings and Automated ML on **Azure** for model training and deployment.

NLP and AI-powered Resume Matchmaker

[Source Code](#)

- Developed a Streamlit app using NLP technologies (**HuggingFace-BERT**, **Doc2Vec**, **Generative AI**) for matching resumes with job descriptions, generating enhancement suggestions, and evaluating model precision with MSE and RMSE.

Water Quality Prediction Web App using Machine Learning 📁

[Source Code](#)

- Developed a **Flask** web app using **XGBoost** to predict Water Quality Index (WQI) for East and West Godavari districts, achieving 89% accuracy in water potability after extensive analysis of 3276 samples and rigorous model testing.

Educational Qualification

Bachelor of Information Technology | Vishnu Institute of Technology, Bhimavaram (CGPA: 8.11)

2021 - Expected 2025

Intermediate, MPC | Sri Chaitanya College of Education, Visakhapatnam (95.2%)

2019 - 2021

Secondary Education | Jawahar Navodaya Vidyalaya (JNV), Vizianagaram (88%)

2014 - 2019

Certifications

Web Development: HTML, CSS, and Javascript for Web Developers (Coursera) 📁

NLP: DeepLearning.AI Natural Language Processing with Classification and Vector Spaces (Coursera) 📁

IASNLP-2024: Advanced training in Natural Language Processing, IIIT Hyderabad 📁

DSA: Data Structure And Algorithms Using Java - Score: 72%(NPTEL) 📁

Data Science and Machine Learning: Intro to Programming 📁, Python 📁, Pandas 📁, Intro to Machine Learning 📁 (Kaggle)

Achievements

Solved **100+ DSA problems** on LeetCode, achieving a 1400+ contest rating.

Finalist at MATHack Hackathon by MATH at T-Hub, recognized in a social media contest.

May 2024

Awarded **13.9 lakhs INR grant** from the Indian government for an AI solution reducing supply chain waste in MSME Idea Hackathon 2.0 2022.

Jun 2023

Recognized as **Best Performer** by AP State Council of Higher Education and CIMSME for contributions to Innovation and Entrepreneurship.

Nov 2022