Nukaraju Neradabilli

८ +91 8639648822 ■ neradabillinukaraju@gmail.com Leetcode in LinkedIn Github Portfolio Hyderabad

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, Web Scraping (Selenium, BeautifulSoup)

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

AI Intern | CognitBotz Solutions | Hyderabad

Sep - Present

• Developed AI/ML solution using Siamese networks, LSTM, BERT, and GPT models with technologies like OpenAI, WhisperX, Nvidia NeMo, and Pyannote for advanced emotion and voice analysis.

Projects and Research

Automated Grading System

Source Code

• 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.

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.

ATS Using NLP and BERT for Resume Matching

Source Code

• Developed an Applicant Tracking System using NLP for resume parsing and **HuggingFace-BERT** for semantic matching of resumes with job descriptions. Evaluated 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) **Intermediate, MPC** | Sri Chaitanya College of Education, Visakhapatnam (95.2%) **Secondary Education** | Jawahar Navodaya Vidyalaya (JNV), Vizianagaram (88%)

2021 - Expected 2025
2019 - 2021
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 Hackathon2.0 2022.

Jun 2023

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

Nov 2022