

NIKITHA REDDY PESARIKAYALA

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SUMMARY

I am a passionate and detail-oriented Computer Science student specializing in Artificial Intelligence and Machine Learning, with a strong foundation in Python, data analysis, and deep learning concepts. I enjoy solving real-world problems through innovative technologies and continuously seek opportunities to expand my knowledge and practical experience. With strong communication, teamwork, and problem-solving skills, I strive to contribute meaningfully to projects that blend creativity with technology while growing into a skilled and impactful software professional.

PROJECTS

Silent Emotions (Jan 2025 – Present)

Developing an innovative AI system that interprets human emotions through lip-reading and sentiment analysis. This project combines the power of **3D Convolutional Neural Networks (3D-CNN)**, **BERT**, and **Vision Transformers** to detect and understand emotional expressions from silent video inputs. My role involves designing the model architecture, preprocessing data, and integrating multimodal learning techniques to improve accuracy and real-time performance. This project aims to enhance human-computer interaction and accessibility for individuals with speech impairments.

Lung Cancer Detection using Small U-Net (Jun 2024 – Dec 2024)

Built a **deep learning-based model** using the **U-Net architecture** to predict and segment lung cancer regions in medical imaging data. The project focuses on improving early cancer detection by applying **image segmentation** and **feature extraction** techniques in **Python** using **TensorFlow** and **OpenCV**. I was responsible for dataset preparation, model training, and result evaluation, achieving promising accuracy in identifying affected lung areas. This project deepened my understanding of medical imaging, convolutional networks, and AI applications in healthcare.

SKILLS

- **Technical:** Python, C, MySQL, HTML, DBMS, OOPs.
- **Tools & Frameworks:** Jupyter Notebook, Google Colab, Scikit-learn, TensorFlow, NumPy, Pandas, Matplotlib.
- **Soft Skills:** Communication, Problem Solving, Presentation Skills.

CERTIFICATIONS

RPA Developer – AICTE (Apr 2024 – May 2024)

05/2025

Natural Language Processing by Infosys Springboard -(02/2024 - 03/2024)

Deep Learning with Python – Infosys Springboard (Nov 2023 – Jan 2024)

HTML, CSS, and JavaScript for Beginners – Infosys Springboard (Oct 2023 – Dec 2023)

EDUCATION

Bachelor of Technology: Computer Science & Engineering (AI & ML)

10/2025

Vignana Bharathi Institute of Technology - Hyderabad

CGPA: **7.85/10**

State Board of Intermediate Education: Maths, Physics and Chemistry

04/2021

Narayana Junior College - Hyderabad

GPA: **960/1000**

Central Board of Secondary Education

04/2019

Panineeya Mahavidyalaya Public School - Hyderabad

GPA: **407/500**