

Gummadi Veda Sai Ram
Research and Development Engineer
9492974273,sairam.g@zentreelabs.com



Education Details

Program	Institute	Year	%/CGPA
M.Tech(Signal Processing and Communications engineering)	Indian Institute of Technology, Tirupati	2023	7.7/10
B.Tech(ECE)	Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad	2017	66
Intermediate(MPC)	Narayana Junior college, Hyderabad	2013	95.8
Class 10	Cyber Age Pupils School, Hyderabad	2011	91

Areas of Interest

- Machine learning, Deep learning, Computer Vision, Signal processing
- Application of mathematical concepts to research and solve real time problems in above mentioned fields

Technical skills

Operating Systems	:	Windows, Linux
Programming Languages	:	C, Python, C++
Machine Learning frameworks	:	TensorFlow, PyTorch, Scikit-learn, Langchain
Data Visualization	:	Matplotlib
Statistical Analysis	:	NumPy, Pandas
Mathematical Concepts	:	Linear Algebra, Calculus, Probability

Work experience

- **Research and development engineer, Zentree labs private limited** [Aug '2023 - till date]
 - Researching on light-weight neural networks using signal processing techniques.
 - Developed a model for document retrieval using LLMs
- **Machine learning engineer, Tata Consultancy Services** [July '2018 - July '2021]
 - Worked as machine learning engineer building various prediction, forecasting, clustering and classification models related to sustainability measures.

Academic projects

- **Liver and Tumour Segmentation using Deep Learning Techniques** [Sep '22 - April '23]
(Guide : Dr. Subhramanyam Gorthi, IIT Tirupati)
 - **Abstract:** Implemented a deep learning-based approach for accurate segmentation of liver and tumour regions in medical images. Developed various CNN architectures and employed techniques such as data

augmentation to enhance the model's performance. The project aimed to assist medical professionals in diagnosing and monitoring liver diseases by accurately segmenting the liver and tumour regions in medical images.

- **Paddy Leaf Disease Classification using Machine learning technique**

(Guide :Dr. Subhramanyam Gorthi , IIT Tirupati)

[Feb '22 - May '22]

- **Abstract:** Utilized machine learning algorithms, including Support Vector Machines (SVM) and neural networks, to classify paddy leaf diseases based on leaf images. Extracted relevant features from the images and trained the models to achieve accurate disease classification. The project aimed to aid farmers in early detection and effective management of diseases in paddy crops using SVM and neural network-based classification techniques.

- **Noise Reduction in Audio Signals using Digital Filtering Techniques**

(Guide :Dr. Rama Krishna Gorthi , IIT Tirupati)

[Dec '21 - Jan '22]

- **Abstract:** This project implements digital filtering techniques to reduce noise in audio signals. By applying various types of digital filters to input noisy audio, the project aims to produce an output signal with significantly reduced noise. This approach holds promise for enhancing the quality of audio recordings in applications such as speech recognition and multimedia content production.