



Yaswanth pavan P

M.Tech Student

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Education Background

M.Tech

2022-2024

Signal Processing and machine Learning

Indian Institute of technology,Kharagpur

CGPA:7.81

B.E

2012-2016

Electrical and Electronics Engineering

Maturi Venkata Subbarao Engineering

college,Hyderabad

Marks:78.4%

Class 12th

2010-2012

Andhra Pradesh Intermediate Board

Narayana Junior college

Marks:95.7%

Class 10th

2010

Andhra Pradesh Secondary Board

Marks:88.83%

Skills

Programming Languages

- Python
- Matlab
- C++
- C

Libraries

- Open CV
- Pytorch
- Numpy
- Pandas
- Matplotlib
- Scikit-Learn

Software Tools

- Jupyter Notebook
- VS Code
- Google Colab
- Latex

OS Proficiency

- Windows
- Linux

About Me

I'm currently pursuing my Master's degree in Signal Processing and Machine Learning. I'm deeply passionate about Machine Learning, Deep Learning especially in the domains of Image processing and Biomedical signal processing. I am currently doing research in the field of Computer Vision, exploring the latest advancements and applications of this technology.

Projects

Classification of vehicular motion trajectories in a traffic video

2023 – Ongoing

- Vehicle segmentation, detection, tracking in traffic (color) video data.
- Estimation of vehicular motion trajectories : Polynomial regression fitting.
- Classification of motion patterns : Normal vs Abnormal.
- Sequential learning for anomaly trajectory detection of vehicles : LSTM, Transformers.

Unsupervised classification of Phonocardiogram(PCG)

2022 – Course Project

- Preprocessed the PCG signals using the Shannon Energy envelope extraction approach.
- Extracted time domain features and did K-Means Clustering to differentiate normal and abnormal PCG signals.

Lossy, Lossless data compression and Music classification

2023- Course Project

- Lossless compression on both text and image files using Huffman coding.
- Lossy Compression of Olivetti Faces Dataset using PCA and SVD.
- Music classification with 512-DCT as a feature vector using Bayesian classifier .

Adaptive probability filter for removing salt and pepper noises in an image

2022- Course Project

- Initially, salt (255) and pepper (0) noises are detected in an image and stored in a matrix.
- Removed salt and pepper noises based on the noise-free intensity distribution and repetition in the neighborhood.

Course Work

- Digital Image Processing
- Probability & Random Process
- Linear Algebra for Signals & Systems
- Geometric Methods for Computer Vision
- Machine Learning for Signal Processing
- Deep Learning Foundations and Applications
- Convex Optimisation