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 Enginnering 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 conducting 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 classifiaction 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