Deepanshu

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EDUCATION

INDIAN INSTITUTE OF TECHNOLOGY, JODHPUR
B.tech in Computer Science
2021-2025(Expected)
Cum.GPA 7.55
(Till 4th semester)

GOOD DAY DEFENCE SCHOOL
Class 10 to 12 Non-Medical
Hanumangarh, Rajasthan
Class 12th : 94%

D.A.V CENTENARY PUBLIC SCHOOL
Class 10 92.8 % CBSE
Graduated 2019

LINKS

LinkedIn:// Deepanshu
Github:// deepanshu0912

COURSEWORK

UNDERGRADUATE
- Data Structures and Algorithms
- Operating Systems
- Database and Management System
- Mathematics for Computer Science
- Probability, Statistics and Stochastic Processes
- Pattern Recognition and Machine Learning
- Intro to Computer Science

SKILLS

PROGRAMMING
- C++
- Python
- PyTorch
- TensorFlow
- React-Js
- Node-Js
- Django

Soft Skills:
- Team Work

INTEREST

- BasketBall(National Winner)
- Tennis

PROJECTS

LANE-DETECTION USING DEEP LEARNING March - 2024 | Project - Under Professor Angshuman Paul
- Developed a deep learning Image segmentation approach to identify lanes in a driving scenario.
- Developed a deep learning Image segmentation approach to identify lanes in a driving scenario.
- The Dataset contained Clips of a driving session on a highway in California.
- Used U-Net and E-Net architecture to do binary mask Image segmentation.And did a comparative study to analyze both the architecture in various metrics.
- We have introduced innovative approach by implementing our custom loss function as well as giving a detailed study of a new Conv-Lstm architecture for the existing problem.

SNAP SPEAK
Sep 2023 – Aug 2023 | Self Project | DataSet
- Developed an image captioning generator utilizing a dataset of 8,000 images, each with five captions.
- Implemented a hybrid model combining VGG16 (CNN) for image features and LSTM (RNN) for text captions.
- Evaluated model performance using the BLEU Score metric with BLEU-1 score of 0.5.
- Tech used : Tenserflow, computer vision and Word2Vec.

FRUIT AND VEGETABLE IMAGE CLASSIFICATION AND RECIPE GENERATION   April 2023 | Supervisor: Prof. Richa Singh | Data Set
- Developed a fruit and vegetable image recognition system with 36 different classes.
- Utilized traditional machine learning algorithms (KNN, Random Forest, SVM, Bayesian, Logistic Regression) achieving 97% accuracy.
- Implemented Neural Networks and CNN with augmentation for 98% accuracy.
- Applied ResNet architecture for transfer learning with 96% accuracy.
- Integrated EDMAMA API for recipe generation based on recognized fruits and vegetables.
- Tech used : machine learning, computer vision and API integration.

YOUTUBE SPAM COMMENT CLASSIFICATION
Mar 2023- Apr 2023 | Supervisor: Prof. Richa Singh
- The dataSet contained comments from videos from 4 different YouTubers .
- Used textual data pre-processing using NLTK.
- Applied unsupervised learning algorithms to detect spam comments.
- Tech used : SciKit Learn, NLTK.

SKY HOOK IDEATION FOR NUCLEAR WASTE DISPOSAL(2021-2022) (COURSE PROJECT)
Mar 2023- Apr 2023 | Supervisor: Prof. B.Ravindra
- Given an ideation for nuclear waste disposal using sky hook.

ACHIEVEMENTS

2019	National Basket Ball winner in India among 28 states and 8 Union territories.
2022	Awarded third prize in a competition start-a-startup as a part of E-Conclave IIT J.