

# 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 : Tensorflow, 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.