Hiteshi Singh

Pre-final year | Electrical Engineering | IIT Jodhpur
singh.75@iitj.ac.in | +91-8708151323

EDUCATION

UNDERGRADUATE
IIT JODHPUR
B.Tech | Electrical Engineering
Expected 2023
CGPA : 8.04/10

SENIOR SECONDARY
THE CENTURY PUBLIC SCHOOL
2019 | Karnal
Percentage : 94.2

SECONDARY
GURU NANAK GIRLS SCHOOL
2017 | Karnal
Percentage : 98.6

LINKS

Github:// **hiteshidudeja**
LinkedIn:// **hiteshi-singh-a3a7191a2**
Website:// **hiteshidudeja**

COURSEWORK

UNDERGRADUATE
Introduction to Computer Science
Linear algebra and differential equations
Probability, Statistics and Stochastic processes
Data Structures and Algorithms
Digital Design
Physical Electronics
Signals and Systems
Pattern Recognition and Machine Learning

ADDITIONAL COURSES
Machine Learning
CS229: Machine Learning
CS231n : CNNs for Visual Recognition

SKILLS

PROGRAMMING LANGUAGES
• Python • C • C++ • MATLAB

DEEP LEARNING TOOLS
• PyTorch • Keras• TensorFlow
• OpenCV • Scikit-Learn

OTHERS
• LaTeX• Linux
•HTML • CSS

PROJECTS

MASK VS NO MASK FACE DETECTION
April 2021 – May 2021 | IIT Jodhpur
- Preprocessed the dataset to balance masked and unmasked images using data augmenting techniques.
- Analysed the scores after applying machine learning algorithms like Random Forest, Gaussian Naive Bayes and Support Vector Machine
- Analysed the effect of using PCA for dimensionality reduction

IMAGE CLASSIFICATION ON CIFAR10 DATASET
April 2021 – May 2021 | IIT Jodhpur
- Analysed scores from various machine learning algorithms like K-nearest neighbours , K-means clustering
- Analysed the scores from neural network created using pytorch.

ML-DL IMPLEMENTATION   (Contributor)
Feb 2021 – March 2021 | IIT Jodhpur
- The repository analyze the implementation of ML andDL algorithms in pure python using only numpy
- The repository covers various sub-domains like Supervised, Unsupervised, Ensemble Learning, Dimensionality Reduction etc
- Implemented agglomerative clustering algorithm from scratch using numpy, created dendrograms for visualisation using matplotlib, implemented some loss functions , fixed some bugs as a part of 'Winter of Codes

GLOBAL GIVING
Nov 2020 - Dec 2020 | IIT Bombay
- Created a multipage website as a part of IIT Bombay tech-fest 2020
- Learnt various aspects of designing and linking web pages using HTML and CSS.
- Deployed at : **Global Giving**

INTERNSHIP

IIT PATNA | Guide- Dr. Sriparna Saha
Protein-Protein Interaction prediction using graph neural networks
June 2021 – ongoing
- Working on geometric models like graph convolution networks, graph attention networks to predict protein -protein interaction
- Preprocessed the dataset : Converted proteins to graphs using networkx, biopython , biographs

EXTRA CURRICULARS
- Joint Secretary | Science Society, IIT
- Participated in INTER-IIT Sports Meet 2019 held at IIT Bhubaneswar.
- Volunteered in college's tech-fest Prometeo (2020)
- Participated in Winter of Codes (2020)