

# Nirbhay Sharma









#### **Education**

B.Tech Computer Science

Aug'19-Present

Indian Institute of Technology Jodhpur

CGPA (Ongoing): 8.85 / 10

Class 12th Mar'18-Mar'19

Dehradun public school, Muzaffarnagar

Percentage: 96.4%
Technical Skills

**Languages:** Python, C/C++, HTML/CSS, Javascript

**Tools and Frameworks:** Pytorch, Sklearn, Numpy, Pandas, Matplotlib,

Seaborn, Regex, Heroku, Git, Github, Firebase, Mongodb

**Familiar with:** Tensorflow, Java, React, Nodejs, Google Colab, openCV

**Experience** 

Chest X-Ray Image Classification | Python, Pytorch, torchvision, numpy, matplotlib

Mentor: Dr. Angshuman Paul | IIT Jodhpur

Jun'21 - Present

- Task is to Design a **Light weight model** for the **detection of anomaly in the X-Ray** images
- Implemented various models (Squeezenet, shuffle net, Resnet, Mobilenet)
- achieved 72% accuracy so far with the fine tuning of these models

### **Projects**

#### Mask - NoMask Detection | Github | Python, Pytorch, Jupyter notebook, numpy, PIL, matplotlib

- Detected around 5300 images under masked and no masked category with an accuracy of 99.6%
- Used MobileNet v2 model in classification
- Combined the model with **OpenCv** for real time detection

#### Skin Cancer Detection | Github | Pytorch, jupyter notebook, numpy, matplotlib

- Detected around 10000 images under the corresponding disease (7 classes) with accuracy of 73.9%
- used **squeezenet (Modified)**, **Mobilenet** for classification

## ML Algorithms from Scratch | Github | Pytorch, torchvision

- Implemented CNN architectures, ML algorithms from scratch
- Models created: Resnet50, Squeezenet, Combination of squeezenet + Mobilenet , MLP , K-means

#### **Achievements**

- Among top 0.5 percentile in JEE Mains out of 1M students
- Among top 2% in JEE Advance out of 2.45 lakh students
- Secured 23rd state rank in UPTU Examination among 1.5 lakh students
- Upgraded department from Mechanical to Computer Science
- 6 star in problem solving on Hackerrank