# ROHAN GARG

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#### **EDUCATION**

# Indian Institute of Technology Roorkee

B.Tech in Production and Industrial Engineering

# RPS Public School, Rewari

Higher Secondary Certificate, Central Board of Secondary Education

Jun 2018 - Apr 2020

CGPA: 7.61/10.00

Percentage: 94.4%

### FIELD OF INTERESTS

Mathematics | Deep Learning | Computer Vision | Cryptography

#### TECHNICAL SKILLS

Pytorch(intermediate) | Hugging face library(intermediate) | Tensorflow(beginner) | Python Data-structures and Algorithms | C++

### **PROJECTS**

# **DeepDreams**

Aug 2021 - Sept 2021

- Worked out on an algorithm, DeepDreams, which is used to visualize the patterns as perceived by different layers of a neural network.
- Developed an implementation of the DeepDreams algorithm in PyTorch by using pre-trained VGG-19 neural network.

### **Pathological Classification**

IIT Roorkee

Vision and Language Group

Apr 2021 - May 2021

- Developed a Deep Learning Classification model to detect retinal diseases from optical coherence tomography (OCT) X-ray images.
- Applied Transfer Learning by utilizing pre-trained ResNet50 in the model to improve accuracy and reduce training time.
- Also identified the ROI (Region of Interest) in the images, which is responsible for classifying the images in one of the four diseases. [Code]

# Literature Summary Repository

Aug 2021 - Present

- Contributed to a GitHub repository, maintained by Vision and Language Group containing summaries of research papers from various popular ML conferences.
- Summarized research papers from conferences like ICLR and CVPR.

[Repository]

# Competitive Programming Repository

May 2022 - Present

- A repository for providing solutions to problems of Competitive Programming.
- The repository is updated at regular intervals with solutions of several problems.

[Repository]

### HONORS AND AWARDS

# 2020 | **JEE (Advanced) 2020**

All India Rank 5167 out of 250,000 students (top 2%) in JEE Advanced 2020, for my admission at IIT Roorkee.

# 2018 | **HScTss Scholar (2018)**

Haryana State Talent Search Scheme Scholarship awarded by Haryana State Government to students with a scientifically oriented mind.

### MOOCS AND COURSES

Introduction to advanced mathematics
Probability and Statistics
Linear Programming
Machine Learning
Intro to Deep Learning with PyTorch
Deep Learning Specialization
CNNs for Visual Recognition(CS231n)

IIT Roorkee
UIT Roorkee
UIT Roorkee
Coursera
Coursera
Stanford

#### COLLEGE ENGAGEMENTS

# Vision and Language Group

May 2021 - Present

Core Member

• A community of Deep learning enthusiasts that conducts regular discussions and workshops with a primary focus on research papers and research in a variety of fields like Computer Vision, Natural Language Processing and Reinforcement Learning.

WebLink

Blogs

Jun 2021 - Present

Deep Learning

• I have written blogs on Medium in the domain of deep learning and research, of which, one was published on VLG medium space.

Blogs.

# Field Hockey, IIT Roorkee

Jan 2021 - Present

- I represent IIT Roorkee at various sports tournaments as a goalkeeper in the Institute Field Hockey Team.
- Won the Inter IIT hockey tournament and conquered overall IIT tournament champions.