

RANJEET KUMAR

B.Tech. Electrical Engineering
UG(IV Year I Semester)
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Registration No: B.Tech./EE/16115094/2020

Indian Institute of
Technology
Roorkee



Area of Interest

Competitive Programming, Algorithm, Machine Learning & Deep Learning

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2019	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	6.97
2016	Twelfth	JAWAHAR NAVODAYA VIDYALAYA PIPERAND LUCKNOW UP ,CBSE Board	83.8 %
2015	Tenth	JAWAHAR NAVODAYA VIDYALAYA FAIZABAD UP ,CBSE Board	9.4

Internships

Summer Internship | ALGO8

19th May 2019 - 19 July 2019

- Project is aimed to develop a **Fire and Smoke detection VideoAnalytics tool**. This model uses **YOLO** object detection Convolutional Neural Network, which gives bounding box around the detected object based on Image classification and localization. **Darknet** framework is used to train YOLO model neural network.
- The dataset used consists of images of labeled fire and smoke, fast image augmentation library(Albumentation) is used to increase dataset.
- An interactive User-Interface is developed using the **Django** web framework.

Projects

Exam Automation Using NLP and Deep Learning | IIT Roorkee

26th July 2019 - Ongoing

- The project aims to build an Exam Automation system which includes:-
- Question paper setting and evaluation in which both objective and subjective types of question-answer pairs were generated from a text corpus using NLTK tools.
- The user web interface will be created for conducting examination and evaluation.

Attendance System Using Face Detection | IIT Roorkee

Jun 2018 - April 2018

- This project is focused upon developing a convenient and user-friendly software system for Biometric Attendance and Security System for institution using Face Image recognition.
- The model used is Pre-trained VGG16, which is trained upon millions of images. Haar cascade OpenCV library used for face detection. Small dataset of face images of class students have been created and the concept of transfer learning is used to train the model. The model is able to recognize and verify a person from a captured image in optimum time.

8*8*8 LED CUBE | IIT Roorkee

Jan 2018 - March 2108

- Multiplexing based Displaying of Data in a 3D Matrix of LEDs for creating a visual treat with 3D effect and patterns based on the concept of Persistence of Vision.
- Various types of microcontrollers such as Arduino, shift-register have been used for creating the model.

Awards / Scholarships / Academic Achievements

- Awarded by A World Of Opportunity Foundation Scholarship(2018-19)
- Dhakshana Scholar(NGO): It provides scholarship for the preparation of IIT examinations to JNV student by conducting examination.
- JNV Scholar: It aims to provide full free education and boarding to economically backward class but intellectual students from village by conducting entrance exam district level.

Skills

Computer languages	C++, Python
Software Packages	Matlab, Basic Django, Window, Linux
Additional Courses Taken	Programming in C++ ,Data structure ,Economics, Microprocessor
Languages Known	English (SRW) , Hindi (SRW)

Positions of Responsibility & Extra Curriculars

NDST/JDST (Dakshana Selection Test)

2019

- Made valuable contribution & support in conduction of Dakshana Selection Test- 2019 at North West Delhi, in which students of nearby government schools participated.

Cadet : National Cadet Corps

2016-2017

- Actively participated in all activities including awareness drive for Tree Plantation and parade training etc.

References

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