# Raghav Ranjan

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## **EDUCATION**

## **IIT JODHPUR**

SOPHOMORE YEAR BTECH IN ELECTRICAL ENGINEERING Expected 2022 | Jodhpur,India CGPA 7.01/10 (upto 3rd sem)

## **B.D.B.K.S INTER COLLEGE, FBG**

CLASS 12 | BSEB 2017 | Bihar Percentage: 78.8%

## S.R.S.V.M,FBG

CLASS 10 | CBSE 2015 | Bihar

2015 | Biha CGPA: 10

## LINKS

Github://raghavranjan005 LinkedIn://raghav-ranjan-827837190 Codechef://raghav\_005

## COURSEWORK

#### **UNDERGRADUATE**

Computer Programming
Linear Algebra and Calculus
Basic Electronics Engineering
Signals and Systems
Circuit Theory
Physics of Semiconductors and Devices
Digital Logic and Design
Probability, Statistics and Random
Processes

# **SKILLS**

#### **LANGUAGES**

• C • C++ (proficient) • Python

#### **TECHNOLOGIES**

- NodeJS Diango MATLAB
- MongoDB HTML/CSS
- Keras

#### **DATA SCIENCE**

• CNN • Tensorflow • OpenCV

## **OTHERS**

•Adobe Premiere Pro •Adobe After Effects

## **PROJECTS**

### SCIENTIFIC CHART READER | B.Tech Project

Mentor: Dr Anand Mishra | Open sourced, Github

- A **Django** based Web Application to extract data in tabular as well as in Latex form from an image of a Bar graph
- Used various CNN architectures such as VGG16, VGG19, InceptionResNetV2 for classification of different types of Bar graphs and uses Pytesseract for detection and extraction of texts
- Designed and implemented a set of algorithm aided by the image processing libraries of **OpenCV** to obtain the height of the bars

## TO DO LIST | STACKHACK 1.0 HACKEREARTH HACKATHON 2020

Deployed at, Todolist 🗗 | Open sourced, Github 🗗

- A Full stack Web Application where one can sign up and manage his task. One can add tags like priority, date, status and update or delete the task
- Technologies used: NodeJS, MongoDB, Heroku

## **IMAGE TO CSV CONVERTER** | SELF PROJECT

Open sourced, Github

- It can be used to extract data from tabular data image and convert it to CSV file.
- Uses **Pytesseract, OpenCV** and other image processing techniques to extract data. A Diango based WebApp\* to host this project (\*ongoing)

### **VOICE TRANSFORMER- AUDIO SIGNAL PROCESSING**

Course Project | Menor: Dr. Rajlaxmi Chouhan | Open sourced, Github

- A framework to convert sample audio signal to a target audio signal
- Uses Concepts of Fourier Transform, Sampling, Peak extraction, IFT

#### **SIGN LANGUAGE** | SELF PROJECT

Open sourced, Github

- It is to detect different hand gestures and Output Text or sound accordingly
- Uses **Flex sensors** combinations to detect gestures

## **ACHIEVEMENTS**

- Rated 4-star badge, Division 1 Programmer in Codechef
- Represented IITJ in Smart India Hackhathon 2020.

## POSITION OF RESPONSIBILITIES

#### JOINT SECRETARY | Science and Technology Society, IITJ

• Managing and executing daily activities of Science and Technology Society, ITJ and ensuring smooth workflow.

#### PR AND PUBLICITY MEDIA HEAD | PROMETEO 2020

Head of PR and Publicity Media team

# EXTRA-CURRICULAR

- Innovation Student Coordinator IIC, IIT Jodhpur
- Core Member FRAME-X The video editing and Film making club of IIT Jodhpur