# Raghav Ranjan

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# **EDUCATION**

## **IIT JODHPUR**

BTECH IN ELECTRICAL ENGINEERING Expected 2022 | Jodhpur,India CGPA: 7.24/10 (upto 4<sup>th</sup> 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 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
Differential Equations and Complex

,

# LANGUAGES

SKILLS

**Analysis** 

• C •C++ (proficient) • Python

#### **TECHNOLOGIES**

- NodeJS Diango MATLAB
- MongoDB HTML/CSS
- Keras Arduino

#### **DATA SCIENCE**

• CNN • Tensorflow • OpenCV

#### **OTHERS**

•Adobe Premiere Pro •Adobe After Effects

# **PROJECTS**

#### SCIENTIFIC CHART READER | B.Tech Project

BTECH IN ELECTRICAL ENGINEERING Mentor: Dr Anand Mishra | Open sourced, Github 🖸 | Demo Video 🖸

- 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 | Mentor: 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
- Placed among 1.1% of 1.05 million JEE 2018 aspirants

# 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

# **FXTRA-CURRICULAR**

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