

# Raghav Ranjan

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## EDUCATION

### IIT JODHPUR

BTECH IN ELECTRICAL ENGINEERING  
Expected 2022 | Jodhpur, India  
CGPA 7.24/10 (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  
CGPA: 10

## LINKS

Github:// [raghavranjan005](https://github.com/raghavranjan005)  
LinkedIn:// [raghav-ranjan-827837190](https://www.linkedin.com/in/raghav-ranjan-827837190)  
Codechef:// [raghav\\_005](https://www.codechef.com/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 • Django • 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](#) | [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 Django 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
- Represented IITJ in Smart India Hackathon 2020.

## POSITION OF RESPONSIBILITIES

### JOINT SECRETARY | SCIENCE AND TECHNOLOGY SOCIETY, IITJ

- Managing and executing daily activities of Science and Technology Society, IITJ 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