

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
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 • 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](#) 

- 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

SCIENCE AND TECHNOLOGY SOCIETY, IIT JODHPUR

Joint Secretary | Aug 2019 - May 2020

PROMETEO 2020

PR and Publicity Media Head | Jan 2020

IIC, IIT JODHPUR

Innovation Student Coordinator | 2020

EXTRA-CURRICULAR

- **Core Member** - FRAME-X The video editing and Film making club of IIT Jodhpur