Raghav Ranjan

https://raghavranjan005.github.io
ranjan.1@iitj.ac.in | +91-9931228832

EDUCATION

IIT JODHPUR
BTech in Electrical Engineering
Expected 2022 | Jodhpur,India
CGPA 7.24/10 (upto 4th 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 Analysis

SKILLS

LANGUAGES
• C •C++ (*proficient*) • Python

TECHNOLOGIES
• NodeJS • Django • 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
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

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