

# HERUMB SHANDILYA

DATA SCIENTIST / MACHINE LEARNING ENGINEER

## TECHNICAL SKILLS

- Data Science
- Relational Databases
- Machine Learning
- Deep Learning
- Data Analysis
- Computer Vision
- Natural Language Processing
- Statistics and Probability
- Arduino/IOT
- Flask
- FastAPI
- Jinja2
- Raspberry Pi
- Python
- Git
- Web Scraping
- Data Structures
- Linux

## PERSONAL SKILLS

- Quick Learner
- Reliable and Professional
- Organized
- Time management
- Always Motivated
- Project Management
- Communication Skills
- Punctual
- Content Writing

## VOLUNTEERING EXPERIENCE

- Volunteer, Microcontroller Based Robotics Club

## ARTICLES

- The Average Coder - Medium
- herumbshandilya - Geeks for Geeks

## PROFILE

I am a curious and enthusiastic College Student, I love learning new things and am always sincere in the tasks provided to me. I am pursuing B.Tech. in Computer Science. I am seeking to use my knowledge in Data Science and Machine Learning to effectively serve your company in an internship position. I am dedicated and committed to becoming a dependable and valuable team member.

## EXPERIENCE

### DATA STRUCTURE AND ALGORITHM TEACHING ASSISTANT

Coding Ninjas | Dec 2019 - Apr 2020

- Mentored a group of students in their course Data Structure and Algorithm using C++.
- Worked well independently and on a team to solve problems.
- Served as an influential contributor for content development projects created by students.

### DATA SCIENCE AND MACHINE LEARNING TEACHING ASSISTANT

Coding Ninjas | May 2020 - Sep 2020

- Mentored a group of students in their course Data Science and Machine Learning.
- Worked well independently and on a team to solve problems.
- Evaluated and improved the projects created by students as a part of the course.

### FREELANCING

Freelancing | Nov 2020 - Present

- Create Projects given by the mediator and complete the tasks given along with them.
- Provide Complete explanation of projects and steps required to complete them.

### TECHNICAL CONTENT INTERN

GeeksforGeeks | Dec 2020 - Present

- Writing articles to be published at GeeksforGeeks particularly aimed at Machine Learning.
- Review and improve existing articles at GeeksforGeeks.

## EDUCATION

### BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING

Jaypee Institute of Information Technology | 2018 - Present | 8.3(CGPA)

# MY PROJECTS

## OTHER PROJECTS

- **Auto Garbage Disposal System**
- **Home Automation System**
- **Traffic Management CRUD Application**
- **Bluetooth/Voice Controlled Car**
- **Data Analysis on Women's Apparel E-Commerce Dataset**

## CONTACT

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Github:

<https://github.com/krypticmouse>

### OMR Sheet Evaluator

- Deployed over web using Flask that takes the image of OMR sheet filled by the students and answer key file to store and display the result of the student along with the enrollment no. by finding choice he filled in OMR.
- **Technology Used:** OpenCV, Flask, SQLite, Jinja2, Numpy, HTML/CSS

### Voice Controlled Handwriting Machine

- A Device that I created to take speech as input in a app template created in Blynk, which was converted to text and sent to NodeMCU which instructed the movements of motors in order to write the text on Paper
- **Technology Used:** NodeMCU, Blynk

### Face ID Lock for Doors using Raspberry Pi

- A Biometric Door Lock that can register a user by taking 30 snapshot of users face detected using HAAR Cascades, captured by PiCamera, and use those images to train a face recognizer to recognize the registered users. If the user is recognized as a registered one then the Door was unlocked using GPIO Zero Library to control the lock.
- **Technology Used:** OpenCV, Raspberry Pi

### Automated Parking System

- The task was to automate the data entry part of a parking garage, by taking in a video as an input, I used Detectron2 to find the vehicle in the frame and extracted, after which I extracted the License Plate by finding rectangular contours using OpenCV and passed that as input to the OCR to get the text as output and storing it and vehicle type in the SQLite database.
- **Technology Used:** Detectron2, OpenCV, SQLite, Tesseract

### Social Distance Remote/Physical Surveillance

- Task is to implement a real time social distance surveillance that detects people using Detectron2 and mark the people if they cross a threshold distance and stream this to web. Since the video feed came from multiple CCTV we transmitted the id of video feed's result to Firebase, this data was fetched via NodeMCU which instructed the LED of corresponding ID to glow alerting people.
- **Technology Used:** PyTorch, Detectron2, HTML/CSS, Flask, NodeMCU, Firebase, Scipy, Numpy, OpenCV, MicroPython

### Face Generation using DCGAN

- Trained over celeba dataset, my goal was to get a generator network to generate new images of faces that look as realistic as possible. I was also able to visualize the results of my trained Generator to see how it performed
- **Technology Used:** PyTorch, Pandas

### ImDB Review Sentiment

- Deployed over web using Flask and trained on ImDB movie review. The review was submitted as input via a form on web which was given a input to NN to return whether the review was positive or negative.
- **Technology Used:** PyTorch, HTML/CSS, Flask

### Stock Prediction

- This project used LSTM, ARIMA model and FbProphet that were trained over TATA Stock Dataset. The models predicted the rest of the stock pricing and then the results of each of them were predicted.
- **Technology Used:** Pytorch, statsmodel, fbprophet