

# Rashmi Mertia

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## EDUCATION

### IIT JODHPUR

PRE-FINAL YEAR BTech IN ELECTRICAL ENGINEERING

Expected May 2022 | Jodhpur, India  
CGPA 8.45/10 ( upto 3rd sem)

### KENDRIYA VIDYALAYA

SENIOR SECONDARY EDUCATION

2016-2017 | Jodhpur, India  
Percentage(PCM): 94.2/100

### KENDRIYA VIDYALAYA

SECONDARY EDUCATION

2014-2015 | Jodhpur, India  
CGPA 10/10

## SKILLS

### PROGRAMMING LANGUAGES

•C •C++ •Python

### TECHNOLOGIES

•HTML •CSS •Django  
•Keras •Matlab

### DATA SCIENCE

•Convolutional Neural Networks •Object Tracking •Recurrent Neural Networks •OpenCV

### LANGUAGES

•English(proficient) •Hindi(proficient)  
•German(Familiar)

## COURSEWORK

### UNDERGRADUATE

Computer Programming  
Linear Algebra and Calculus  
Differential Equations and Complex Analysis  
Probability Statistics and Random Processes  
Basic Electronics Engineering  
Digital Logic and Designs  
Signals and Systems  
Electromagnetism and Optics  
Physics of Semiconductor Devices  
Electromagnetic Theory  
Power Systems  
Circuit Theory

## LINKS

Github:// [rashmimertia](#)  
LinkedIn:// [rashmimertia](#)  
InterviewBit:// [rashmi](#)

## PROJECTS

### URBAN SOUND CLASSIFICATION | BTech PROJECT

Feb 2020 - July 2020 | Mentor: Dr. Rajendra Nagar

Open Sourced : Github

- A Voice Classifier Model based on **Convolutional Neural Networks** and **Long Short Term Memory Networks**(a class of Recurrent Neural Networks), implemented using Keras
- Trained and Tested the model on a standard 8k dataset of voices collected from UrbanSound8K

### COCKTAIL PARTY PROBLEM | SELF PROJECT

Jan 2020 - April 2020 | Mentor: Dr. Rajendra Nagar

Open Sourced : Github

- Blind source separation using **Independent Component Analysis**. Negentropy was used as the measure of non-Gaussianity
- Recovered the original component signals from the mixed signals without any knowledge about the sources

### HAND SEGMENT DETECTION | SELF PROJECT

Sept 2019 - Nov 2019 |

Open Sourced : Github

- A program using Open CV that can detect a Hand, segment the hand, and count the number of fingers held up in a video
- Found Contours and then counted the number of fingers held up by utilizing a **Convex Hull**

### STAR SOCIAL | SELF PROJECT

June 2019 - December 2019

Open Sourced : Github

- A python-django based social site clone, which enables the users with core functionalities of creating/joining/leaving groups and posting in them
- The user interface was enhanced using Bootstrap - a CSS framework and Misaka - a python library for improved HTML rendering in django

## ACHIEVEMENTS

- Placed among **0.5%** of 1.05 million JEE 2018 aspirants
- Awarded as the best Academician of KVS Jodhpur in 2017 by MHRD

## POSITION OF RESPONSIBILITY

### STUDENT CO-ORDINATOR OF ALUMNI RELATIONS COMMITTEE AT IITJ

Nov 2019 - Present

- Managed and Organized 5th Convocation 2019
- Organized **First Alumni Meet** of IITJ for 120 alumni attendees working in group of 4

## EXTRA-CURRICULAR

**Assistant Head** - Public Relations team of IGNUS (2020)

**Core Member** - Fine Arts Club