# Rajat Bhardwaj

Pre-Final Year | Electrical Engineering | IIT Jodhpur bhardwaj.4@iitj.ac.in | +91-9887965188 | Portfolio | Github

## **EDUCATION**

## **IIT JODHPUR**

**B.TECH IN ELECTRICAL** 

**ENGINEERING** 

Expected 2022 | Jodhpur,India cum CGPA: 8.45/10 (Till 4th sem)

#### V.M. PUBLIC SCHOOL

**CBSE CLASS 12** 

May 2017 | Hanumangarh, India Percentage: 92.2%

#### **BLOSSOM ACADEMY**

May 2015| Suratgarh, India CGPA: 10.0

## SKILLS

**Programming Languages** 

- C++(proficient) Python HTML
- •CSS Javascript Utility
- Git Atom VSCode
- Web Frameworks (familiar):
- ReactJS Express.js with Node.js Database:
- Mongo DB, SQL

## LINKS

Codechef://@ra\_jatt Github://rajatbhardwaj007 LinkedIn://rajat-bhardwaj

## COURSEWORK

## MOOC'S

Data Structures And Algorithms (University of California, San Diego) Python 3 Programming (University of Michigan) Object Oriented Proramming Conecpts(Self-taught) Full stack Web-Development Course (Udemy)

#### **RELEVENT COURSES**

Computer Programming. Linear Algebra And Calculus. Probability, Statistics and Random Process. Complex Analysis and Differential Equations. Signals and Systems.

## **PROJECTS**

## **ONLINE HANDWRITING RECOGNITION** | A SAMSUNG PROJECT

Jan 2020-April 2020 | Github | GUIDE- DR. GAURAV HARIT

- Used **Element Tree** and **Pandas** library in Python for extracting coordinates.
- Used **Bezier Curve fitting** method to plot strokes approximately using **numpy**, **matplotlib**, **scipy** libraries in Python and enhanced efficiency for Recognition.
- Successfully implemented **Research Paper** and method leads to up to 10x faster recognition with error reduction up to 20%-40% for most languages.

#### PATH-FINDING VISUALISER FOR DIJKSTRA'S ALGORITHM

April 2020-May 2020 | Website | Github | SELF-PROJECT

- Built **ReactJS** application for visualizing **Dijkstra's** minimum path finding algorithm adapted for a 2D grid.
- Implemented a dynamic visualization system for algorithm **animation** using **Javascript** and styles using CSS.

#### **VEHICLE NUMBER PLATE RECOGNITION**

Aug 2019-Nov 2019 | Github | GUIDE- DR. RAJLAXMI CHAUHAN

- Extracted Characters from a given image of number plate using MATLAB.
- Completed project for Signals and Systems course with a team of 5 members.

## FRIEND'S CHATBOX | WEBAPP USING NODE.JS AND SOCKET.IO April 2020-May 2020 | Website | Github | UDEMY COURSE PROJECT

• Created full Realtime Chat Web Application using React.js on Frontend and with **Node.js** + **socket.io** web socket library on the back end.

# **ACHIEVEMENTS**

- Rated **4-star (Max. Rating-1965)** on Codechef | **@ra\_jatt**.
- Ranked **272** on Codechef June Long Challenge 2020 div. 1 out of more than 20000+ participants.
- Rank-2525th globally in Google Kickstart Round B 2020 out of 10000+ coders.
- JEE Advanced 2018 AIR:**5294** among the shortlisted 2 lakh (approx.) students.

# POSITION OF RESPONSIBILITIES

### STUDENT REPRESENTATIVE

July 2019-July 2020 |

• Gained **Leadership** Qualities through taking positive decisions and handling diverse interests of students.

#### **CORE-MEMBER** | Career Development Cell

July 2019-At Present

• Expanding opportunities for students for interns and jobs.

# EXTRA CURRICULARS

- Core Member- Literature Club
- Participated in **Hindi Writing Competition** in **Cult-Meet** 2019-20.