

Charan Singh

Pre-Final Year B.Tech | Engineering Science | IIT Jodhpur
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EDUCATION

UNDERGRADUATE (ES)

IIT JODHPUR | EXPECTED 2025

Major - Computer Science and Engineering

CGPA : 7.71/10 (upto 5th sem)

INTERMEDIATE (HSC)

KENDRIYA VIDYALAYA gBRD AFS, PUNE | 2020

Percentage: 95.2/100

MATRICULATION (SSC)

KENDRIYA VIDYALAYA gBRD AFS, PUNE | 2018

Percentage: 86.6/100

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms

Operating Systems

Database Systems

Computer Architecture

Cyber Security

Introduction to Machine Learning

Embedded Systems & IoT

Design and Analysis of Algorithms

Design and Analysis of Experiments

Probability, Statistics and Stochastic Processes

SKILLS

PROGRAMMING LANGUAGES

- C/C++
- Python | Django
- MongoDB | Express | React | Node.js
- HTML | CSS | JavaScript
- Flutter | Dart | Kotlin
- MATLAB | R | Machine Learning

MISCELLANEOUS

- Blockchain | Hardhat
- Git | Github | Firebase | Rest API
- MySQL Workbench | SQL
- Numpy | Pandas | Scikit-Learn
- Arduino | NodeMCU
- Platforms: Windows, Linux, Kali Linux

LINKS

Portfolio: [Charan Singh](#)

Github: [Charan Singh](#)

LinkedIn: [Charan Singh](#)

Leetcode: [Charan Singh](#)

PROJECTS

INTERLINKD | MERN | FULL STACK DEVELOPMENT

Messaging and Networking Platform | GITHUB

- Enables user registration, search, direct and group messaging with file attachments.
- Allows sending/receiving friend requests and real-time notifications for continuous interaction.
- Facilitates creating and managing group chats, with extensive admin functionalities for up to 100 members.
- Users can delete chats, unfriend others, and customize their chat experience.
- A secure, key-accessible admin dashboard for chat metrics

INTELLIGENT PROCESS TERMINATION FOR ENHANCED SYSTEM PERFORMANCE | Operating System Project | GITHUB

- Designed a system to identify and manage least-used applications, reducing CPU and RAM usage for improved system performance
- Developed a proactive process termination mechanism, alleviating overheating issues and prolonging hardware lifespan
- Devised intelligent algorithms to minimize unwanted resource consumption without compromising user experience

SEVENTYFIVE | ANDROID DEVELOPMENT

Kotlin | Dr. Suchetana Chakraborty | IIT Jodhpur | GITHUB

- Built an attendance app to reduce proxies during lectures
- Utilized Nearby Share (WiFi-Direct & Bluetooth) technology for data transfer.
- Designed and implemented two distinct user interfaces – one for students and another for teachers – to ensure a user-friendly experience
- Explored the implementation of router-based checking, enhancing the app's efficiency and accuracy in attendance tracking

CLEARING BLIND SPOTS USING ULTRASONIC SOUND SENSORS

Dr. Tekcham Gishan Singh | IIT Jodhpur | GITHUB

- Developed a cost-effective solution to assist vehicle drivers in clearing blind spots and preventing accidents
- Implemented Ultrasonic sensors to accurately detect and track the location and speed of nearby vehicles in real-time
- Utilized Tkinter to dynamically visualize nearby vehicles, changing colors based on proximity for improved driver awareness

ACHIEVEMENTS

- Secured **Top** rank in DSA course with **A** Grade, outperforming **220+ students**
- Among top **1 percent** students in Pre-Regional Mathematics Olympiad | RMO Qualified
- Solved **150+ questions** on Leetcode, GeeksforGeeks, Hackerrank.
- Among top **0.7 percent** students in Joint Entrance Exam | 2021

POSITION OF RESPONSIBILITY

- **Head** | Web & Communication Team | Society of Alumni Affairs | IIT Jodhpur
- **Senior Executive** | Funding, Advisory & Incubation | E - cell | IIT Jodhpur