



# PAAWAN KARWA

Bachelor of Technology  
Electrical Engineering  
Indian Institute of Technology, Jodhpur

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[CodeForces](#)  
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## EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B. Tech.	Indian Institute of Technology, Jodhpur	8.40 (Current)	2021-Present
Senior Secondary	CBSE Board	95.8%	2019-2021
Secondary	CBSE Board	94.4%	2017-2019

## EXPERIENCE

- **OTSUKA HOLDINGS CO., LTD.** May 2024 - July 2024  
*Software Developer Intern* Tokyo, Japan
  - Developed an **Intellectual Patents Landscaping** webapp using **Flask** and **PostgreSQL**, integrating **Generative AI** for comprehensive data analysis of the **Google Patents Dataset(119 million+ records)**.
  - Integrated **Large Language Model** of **Cohere** for **Advanced Data Analysis** to expand company business opportunities and implemented strategies like **Blue Ocean Strategy** on patents fields.

## PROJECTS

- **WEBGEN** Dec. 2021 - July. 2022  
*Engineering Design* [GitHub](#)
  - Collaborated in a team to build a web application that enables users to create and host **personalized websites** effortlessly by **filling out a form**.
  - Designed and implemented an advanced **backend architecture**, including **file generation** and **optimized database queries**, leveraging **NodeJS**, **Express**, and **React**.
- **Movie Recommendation** April 2023 - May 2023  
*Pattern Recognition and Machine Learning* [GitHub](#)
  - Made a model which recommends movies on the basis of genres, ratings as well as users based on the **MovieLens (131k+ records)** dataset. Further worked on **Content Based Filtering** of the movies.
  - Worked on **Collaborative Filtering** as well applied **Clustering on users** to give them better recommendations.
- **NYAI SANGH** Jan 2023 - Feb 2023  
*Inter IIT Tech Meet 13.0* [GitHub](#)
  - Formulated a prototype/solution for PS - **Transforming the Informal Sector into the Formal Sector** (Grad Capital).
  - Created backend for the solution including **Speech to Text Generation**, **Information Extraction**, **Machine Learning Model Integration with webapp** and **File Creation** on **Django** including basic **CRUD** operations.

## SKILLS

- **Technical:** NodeJS, ReactJS, Express, C++, C, C#, HTML, CSS, PHP, Python, Django, Open CV, JavaScript, Dart, Flask, Flutter, SQL, Unity and Data Science.
- **Subjects:** Data Structures and Algorithms (**A**), Pattern Recognition and Machine Learning (**A**), Probability Statistics and Stochastic Processes (**A**), Linear Algebra (**A**), Micro Economics(**A-**), Computer Architecture
- **Non Technical:** Leadership, Communication, Innovative, Open - Minded, Self-Motivated, and Collaborative

## ACHIEVEMENTS

- **Rank 7**, (among 85 students) in the Department of Electrical. 2023
- **Grade A**, in both **Data Structures and Algorithms** as well as **Pattern Recognition and Machine Learning** 2022
- **Rank 42**, among 100000 students participating in **NTSE Stage-1** organized by NCERT 2019
- **Rank 11**, in **International Mathematics Olympiad** by SOF 2021
- **Max. CodeForces Rating, 1475 (Specialist)**
- **Max. Codechef Rating, 1810 (4\*)**
- **Inter IIT Tech Meet**, Participated in Tech Meet 13.0 held at IIT-Kanpur 2023
- **Rank 244**, in **Starters 97 Division 3 (Rated)** organized on Codechef 2024
- **Rank 364**, in **Starters 153** organized on Codechef 2024

## EXTRA CURRICULAR & POSITIONS OF RESPONSIBILITY

- **Mentor**, Programming Club, Indian Institute of Technology, Jodhpur Aug. 2023 - Jul. 2024
  - Conducted many **Programming Contests** and various **Problem Solving and Programming** sessions (10+).
- **Teaching Assistant**, Department of Computer Science, IITJ Aug. 2024 - Dec. 2024
  - Supported more than **20+** students in their **data structures and algorithms** coursework, guiding them in both theoretical understanding and hands-on project development.