

EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Master of Technology	Indian Institute of Technology, Ropar	7.3 (Till 3rd Sem)	2023-2025
Bachelor of Technology	BIT Durg	79.1%	2019-2023
Senior Secondary	Central Board of Secondary Education	63.2%	2018
Secondary	Central Board of Secondary Education	8.2	2016

PROJECTS

- Real-Time Multiplayer Chess Game

Personal Project

– Built a real-time chess game using **Node.js**, **Socket.io**, **Express.js**, **EJS**, **JavaScript**, and **chess.js**.

– Implemented player role assignment (white/black/spectator) and drag-and-drop based piece movement with move validation.

– Enabled live move synchronization across clients, dynamic FEN-based rendering, and board flipping for black player.

April 2025

Github
- Shopping Web Application

Personal Project

– Developed a shopping web application using **Node.js**, **Express.js**, **MongoDB**, **EJS**, and **Multer**.

– Implemented user authentication, dynamic cart functionality, and product management with role-based access for admins.

– Integrated image upload and rendering, responsive layout with Flash Messages for real-time user feedback.

April 2025

Github
- Plant Re-Identification

Dr. Mukesh Saini & Dr. Neeraj Goel

– Developed a dataset of plant species captured under different environmental conditions.

– Designed an ML-based model to identify plant species using image features.

May 2024

Github
- Formal Verification Using Spin Model Checker

Dr. Jagpreet Singh

– Applied formal verification to concurrent systems, ensuring correctness and fairness.

– Modeled and analyzed the 6LoWPAN protocol for network stack reliability.

August 2024 - ongoing

Github
- Productivity Tool

Tech Stack: Django, Python, HTML/CSS,Bootstrap

– Built a web-based platform for class timetable management and study material organization..

– Designed an intuitive UI for seamless access to schedules and notifications.

December 2020

Github

TECHNICAL SKILLS

- Programming Languages: C, C++, Python, Promela

• Web Technologies: HTML, CSS, JavaScript

• Web Frameworks and Tools: Node js,Django, SQL, Git, GitHub

• Formal Verification: SPIN Model Checker, Model Checking

• Operating Systems: Linux, Windows

• Concepts: Object-Oriented Programming (OOP), Network Protocol Verification
- Portfolio

ACHIEVEMENTS

- Problem Solving: Solved 300+ coding questions on platforms like LeetCode and GeeksforGeeks
- Profiles: LeetCode | GeeksforGeeks

KEY COURSES TAKEN

- CSE : Algorithm & Data Structure, Computer System, Mathematical Foundation Of Computer Science,Introduction To Agriculture Cyber Physical Systems ,Cryptocurrencies And Blockchain Technology,Internet Of Things
- Maths & Others: Linear Algebra, Probability

POSITIONS OF RESPONSIBILITY

- Secretary, Pehchaan Ek Safar,IIT Ropar

– Led organizational efforts for social initiatives at IIT Ropar.

– Managed event planning, volunteer coordination, and fundraising activities.

May 2024 - May 2025

MISCELLANEOUS

- Interests, Badminton, Travelling