

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
- 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

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