



# Radha

Bachelor of Technology  
in Computer and Science Engineering  
Indian Institute Of Technology, Ropar

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GitHub | Portfolio

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## EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	7.79 (Till 4th Sem)	2022-2026
Senior Secondary	Central Board of Secondary Education	94.8%	2022
Secondary	Haryana Board of Secondary Education	96.4%	2020

## EXPERIENCE

### • Summer Intern at a startup, HIGHTIDE

May 2024 - June 2024

#### Role - Frontend Developer

IIT BOMBAY

- Developed and implemented the **frontend** of the company's website ensuring a **responsive** and user-friendly design.
- Worked with the UX/UI team on design and wireframing for intuitive and appealing interfaces.
- Utilized agile methods, attended daily stand-ups, sprint planning, and retrospectives for timely delivery.
- Received positive feedback from supervisors for demonstrating strong technical skills, problem-solving abilities, and effective communication.
- Technologies used: **HTML**, **CSS**, **Javascript**

## PROJECTS

### • Interactive Pokedex

June 2024

#### Tech Stack- **HTML**, **CSS**, **Javascript**, **API Integration**

[Demo](#) | [Github](#)

- Developed a Pokedex application using HTML, CSS, and JavaScript with integration of the Pokemon API.
- Implemented a **search functionality** allowing users to find Pokemon by name.
- Integrated **auto-complete feature** for efficient Pokemon **name suggestions** as users type in the search bar.
- Displayed detailed Pokemon information on cards including image, name, description, abilities, type, stats, base happiness, base experience, growth rate and physical attributes.

### • Scapegoat Trees Implementation and Analysis

Sep 2023 - Nov 2023

#### Course: Data Structures and Algorithms

[Github](#)

- Collaboratively implemented Scapegoat Trees in **C**, a self-balancing binary search tree, to efficiently handle insertion, deletion, and search operations.
- Conducted a thorough analysis of the **time complexities** associated with Scapegoat Trees, comparing and contrasting them with **AVL trees**.
- Studied research papers, contributing to the deep understanding of scapegoat trees.

### • ATM Machine

June 2024

#### Tech Stack - **Java** and **Oops**

[Github](#)

- Implemented an ATM machine in Java with **user authentication**, supporting both Checkings and Savings accounts.
- Secure login system with predefined customer numbers and PINs, and enabled new user account creation.
- **Balance checking**, **money deposit**, **withdrawal**, and **fund transfers** between accounts. Intuitive navigation and robust error handling to ensure a seamless user experience.

### • Minor Projects

- **WeatherInsight** : Python script to fetch current weather data | **Python**, **OpenWeatherMap API** | [Github](#)
- **CUCU Compiler** : Developed a **compiler** for a toy language resembling **C** | **Lex and Yacc** | [Github](#)
- **Naruto-Sasuke Game** : Developed a **fighting game** on **Scratch** featuring the anime **Naruto** | **Block Coding** | [Scratch](#)
- **RISC-V Simulator** : Designed an **assembler** for generating **machine code** for data and text segments | **C++** | [Github](#)

## TECHNICAL SKILLS

- **Programming Languages**: C, C++, Java, Oops, Python, Perl, Arduino, Risc-V Assembly Language, Lex-Yacc, MySQL
- **Web Development Markup Languages**:: HTML, CSS, Javascript, API Integration
- **Tools**: Latex, Scratch, VS Code, Venus Simulator, Github

## KEY COURSES TAKEN

- **CSE**: Data Structures and Algorithm, Discrete Mathematics, Digital Logic Design, Programming Paradigms and Pragmatics, Computer Architecture.
- **MATHS**: Calculus, Linear Algebra, Differential Equations, Probability and Statistics.

## POSITIONS OF RESPONSIBILITY

- **Member**, Coding Club, IIT Ropar.
- **Member**, Event Decoration and Hospitality Team of Advitiya'24, IIT Ropar.

## MISCELLANEOUS

- **Scholar Of KVPY'21**, Successfully cracked KVPY'21, a prestigious national-level scholarship program in India. 2022
- **JEE ADVANCED**, Secured 97.6 percentile in JEE Advanced amongst 0.25 million candidates. 2022
- **JEE MAINS**, Achieved 99.28 percentile in JEE Mains amongst 0.9 million candidates. 2022