Krishna Agarwal

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

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GitHub | Website
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Education

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	8.94 (Till 3rd Sem)	2023-2027
Senior Secondary	Central Board of Secondary Education	96.8%	2023
Secondary	Central Board of Secondary Education	98.6%	2021

Projects

- **Idea-Nest** *June 2024*
  Github
  - Developed a collaborative platform using React and Firebase, where users can submit their ideas, view, and engage with ideas shared by others.
  - Implemented secure user authentication and data storage using Firebase Authentication and Firestore to manage user-generated ideas efficiently.
  - Designed a responsive and intuitive interface to ensure seamless navigation and engagement across devices.
- **Weather App** *December 2024*
  Github
  - Designed and implemented an intuitive weather app using React and Tailwind CSS, integrating the OpenWeather API to provide real-time weather data based on user location.
  - Delivered insights like temperature, humidity, air quality, and health tips, making the app suitable for daily use and environmental awareness.
- **Sudoku Swift** *August 2024*
  Github
  - Built a fully functional Sudoku solver application using React, enabling users to solve Sudoku puzzles with a user-friendly interface.
  - Utilized the backtracking algorithm to efficiently solve Sudoku puzzles in real-time, ensuring accurate and fast solutions.
  - React's state management to handle user inputs, validate puzzle entries, and track the solving process dynamically.

Course Projects

- **Geographical Region Statistics using 2D Segment Tree** *October 2024*
  Dr. Anil Shukla **Github**
  - Developed a C application using a 2D Segment Tree to monitor environmental statistics (temperature, humidity, air quality) over a geographical grid, enabling efficient storage and querying.
  - Optimized retrieval of sum, average, min, and max for rectangular sub-regions with $O(\log(m) \times \log(n))$ complexity for grids of size $m \times n$, showcasing advanced data structure applications.
  - Demonstrated real-world use cases like weather monitoring, pollution tracking, and forest fire risk prediction by processing large datasets efficiently.

Technical Skills

- **Programming Languages**: C++, Python, Javascript, HTML, CSS
- **Areas of Interest**: Data Structures and Algorithms, Competitive Programming
- **Soft Skills**: Public Speaking, Event Management, Team Work, Leadership

Key courses taken

- **CSE & Maths**: Algorithm & Data Structures, Discrete Math, Digital Logic Design, Linear Algebra, Calculus
- **Others**: Professional Communication, History of Technology, Economics
- **Running**: Programming Pragmatics and Paradigms, Computer Architecture

Positions of Responsibility

- **Media and Outreach Co-ordinator**, Dance Club-IIT Ropar *June 2024 - Present*
- **UG Mentor**, Indian Student Mentorship Programme , IIT Ropar *July 2024 - Present*
- **Web Development Team**, Indian Student Mentorship Programme , IIT Ropar *May 2024 - June 2024*

Miscellaneous

- **Myntra HackerRamp:WeForShe 2024** ,
  Selected from a pool of **29,643** candidates to advance to the top **1,214** *2024*
- **Codess Cafe - Mentee**,- Selected among **1200**+ applicants *2024*
- **Institute Scholarship**,- Recieved Institutional Merit Scholarship for being in **top 7** percent of the batch *2023*
- **JEE Advanced 2023**,- Secured an All India Rank of **4212** *2023*
- **JEE Mains 2023**,- Secured a percentile of **99.67** *2023*