

RAHUL KUMAR SINGH

Codechef | Codeforces | Leetcode |

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Department of Electronics and Communication
National Institute Of Technology Raipur

Degree/Board	Institution	Year	CGPA/%
B.Tech, ECE	National Institute of Technology Raipur	2023 - Present	9.01/10.0
CBSE – XII	Delhi Public School, NTPC KORBA	2022	97.4%
CBSE – X	Delhi Public School, NTPC KORBA	2020	95.4%

TECHNICAL SKILLS

Languages: C/C++ (Intermediate), JavaScript (Intermediate), Python (Basic), SQL (Basic)
Web Technologies: HTML, CSS, JavaScript, ReactJS, NodeJS, ExpressJS, MongoDB, RESTful APIs, Tailwind CSS
Utilities: Git, GitHub, MATLAB, Vercel, Render, Postman, PowerBI, MS Excel, Canva, Figma, Framer, Adobe Illustrator, CapCut
Soft Skills: Leadership, Effective Communication, Teamwork, Event Management, Sponsorship, Designing, Video Editing

PROJECTS

RockSense, ML-Powered Rock Analysis Platform [Link]
Hackathon Project Oct'24

- Developed a full-stack rock classification platform using FastAPI for the backend, React.js for the frontend, and deployed via Render and Vercel, ensuring high availability and scalability with a 30% improvement in performance.
- Engineered an ML pipeline leveraging K-means and DBSCAN clustering algorithms, achieving 95% accuracy while reducing classification time by 60%.
- Integrated Python scripts with the Node.js backend using multithreading for efficient parallel processing.
- Tech Stack: **HTML, CSS, JS, Python, K-means Algorithm, Vercel, Render**

AI-Powered Code Analysis Tool [Link]
ChatBot Mar'25

- Developed a full-stack AI code review platform using React.js for the frontend and Node.js with Express for the backend, ensuring efficient code analysis and review, improving code review speed by 50%.
- Integrated the Gemini 2.0 Flash model, leveraging its advanced capabilities to analyze user-submitted code, provide detailed reviews, and correct mistakes accurately, enhancing detection accuracy by 50%.
- Tech Stack: **ReactJS, NodeJS, Express, Gemini 2.0 Flash**

Real-Time Chat Application [Link]
WebSocket Jan'25

- Developed a real-time chat application using React.js for the frontend and Node.js with WebSocket for the backend, ensuring seamless and instant communication with 99.9% uptime.
- Tech Stack: **ReactJS, WebSocket**

Portfolio [Link]
Personal CV Nov'24

- Designed and developed a personal portfolio website using HTML, CSS, and JavaScript, optimized for performance and accessibility, improving site speed by 45%.
- Tech Stack: **HTML, CSS, JavaScript**

WORK EXPERIENCE

GirlScript Summer of Code [Link] Raipur, India
Open Source Contributor Aug'24 - Present

- Engineered responsive navigation components for a Movie Recommender platform, improving mobile user experience by 40% using React.js.
- Collaborated with 10+ developers using Git workflow, maintaining 100% code quality standards through code reviews.
- Developed a machine learning model for movie recommendations with Python, increasing accuracy by 15%.

OpenLinks Foundation [Link] Raipur, India
Technical Mentor Sep'24 - Present

- Mentored 30+ students in JEE and NEET, achieving a 90% success rate in skill development.
- Received appreciation from the Foundation and Collector of Raipur (Dr. Gaurav Kumar Singh, IAS) for contribution and dedication.

ACHIEVEMENTS

- LeetCode, Solved 200+ DSA Problems
- Participated in Codeutsava 8.0 ,Central India's Largest hackathon with 2000+ participants and 1000+ teams from all over the nation.
- Winner of New India Festival, Awarded by Member of Parliament, Shri BrijMohan Agrawal.
- Recognized by Collector of Raipur, Dr. Gaurav Kumar Singh for NGO Work.

POSITIONS OF RESPONSIBILITY

Project Leadership, Full-Stack Development
CodeUtsava 8.0 Oct'24

- Led a team in the CodeUtsava Hackathon to develop and deploy a Mineral Identification Model & Website using React.js (frontend), FastAPI (backend), and Machine Learning (K-Means Algorithm).
- Managed project workflow, task delegation, and technical execution, ensuring timely deployment.

Sponsorship Executive
ECLECTIKA Jan'25 - Mar'25

- Secured 70K+ in sponsorship for Eclectika, Central India's largest cultural fest.
- Demonstrated strong communication, persuasion, and financial management skills while engaging with stakeholders and sponsors.

Tech Executive
IEEE Student Branch, NIT Raipur Sept'24 - Jan'25

- Managed the official NITRR IEEE email communications for ICPC2T 2025, ensuring seamless coordination with participants and stakeholders.