



## Rochak Roopesh Jain

UG (IV Year I Semester)  
B.Tech. (Electronics & Communication Engineering)  
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### Area of Interest

Software Development, Algorithms, Open Source, Data Structures

### Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2022	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	8.775
2019	Intermediate (Class XII)	Pace Junior Science College, Andheri (MSBSHSE)	88.31 %
2017	Matriculate (Class X)	Vidya Vikasini School, Vasai (I.C.S.E)	96.67 %

### Internships

#### Software Developer Intern | TVAST IT Solutions

August 2020 - September 2020

- Implemented REST APIs for employee monitoring software that keeps a record of their daily work.
- Modified the front-end of the dashboard and integrated graph UI for the visual presentation of employees' progress.

#### Summer Analyst | Citibank, India

May 2022 - July 2022

- Built a workflow-based application for building data pipelines on bulk data systems, using Apache Airflow. The application also involved scheduling these data-flow pipelines through Spark-Jobs and triggering the tasks in the pipeline.
- Developed an automation environment for generating these data pipelines dynamically, and integrated it with Apache Airflow. It is used by the Information Securities Group (ISG) with over 100+ hits each day.

### Projects

#### Covid Second Wave Tweet Analysis | Lab Based Project, ECN-300

January 2022 - May 2023

- Analyzed Tweets being posted, during the 2nd Covid wave in India, to study the impact it had on people and prepared a roadmap on how we can deal with the effects of any forthcoming pandemic waves.

#### People Search | Information Management Group, IIT Roorkee

December 2021 - March 2022

- An Omniport-based app built for the people of IIT Roorkee, where they can search and know about each other, based on their disclosable personal information, interests, and academic background. Tech Stack: Django, React-Redux

#### 5G and Beyond Wireless Communication: Mathematical Analysis | B.Tech Based Project

August 2022 - Present

- Developed the physical layer of Internet Protocols (IPs), which are used for new age 5G and NR communication systems.
- The project is under the supervision of Prof. Ekant Sharma, Asst. Professor, ECE Department.

#### Chakra - Content Management System | Information Management Group, IIT Roorkee

August 2021 - December 2021

- Chakra is a component-based content management system, a modular interface for faculties to manage and publish their pages. It helps manage 6000+ static pages on the IITR website.
- Tech Stack - Scala, Python, Django, Nginx.

#### New Pseudoc App | Information Management Group, IIT Roorkee

September 2020 - December 2020

- A platform to solve technical problems encountered by students and faculties on Channel-i.
- Built the model structure and REST APIs for CRUD operations and developed the UI using ReactJS.

#### R-Care App | Information Management Group, IIT Roorkee

April 2021 - May 2021

- A platform to find or request emergency Covid-19-related resources and find verified leads from the IIT Roorkee Community on the Omniport portal. Role- Full Stack Developer. Tech Stack: Django, React-Redux.

#### IEEE Floating-Point Single Precision (32-bit) ALU | Course Project ECN - 104

March 2020 - June 2020

- This project aimed to develop an Arithmetic Logical Unit, that supports the arithmetic operations and logical operations on IEEE standard 32-bit Floating point single-precision numbers.

### Awards / Scholarships / Academic Achievements

- Global Rank 770 in Atcoder Beginner Contest 254
- Secured All India Rank 1198 in JEE Advanced 2019 (placed in top 0.1 Percentile).
- Global Rank 172 in Codeforces Round #812 (Div. 2)
- Global Rank 575 in Codeforces Round #781 (Div. 2)
- Global Rank 11 in Codechef Starters 56 Division 2
- Global Rank 84 in Codechef Starters 55 Division 2
- Global Rank 670 in Google Kickstart 2022 Round E
- Global Rank 623 in Google Kickstart 2021 Round H
- Secured All India Rank 5565 in JEE Mains 2019 (placed in top 0.5 percentile).

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## Skills

Computer languages	C++, Python, Java, PHP, Javascript, SQL, Verilog, Bash
Software Packages	Linux, Git, React.js, Redux, Node.js, VS Code, Django, Django REST, MySQL, PostgreSQL
Languages Known	English (SRW), Hindi (SRW)

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## Positions of Responsibility & Extra Curriculars

**Chief of Resource Management** | Information Management Group, IIT Roorkee April 2022 - Present

- IMG is a group that manages the intranet services and the official content management system of the IITR website.
- Led a team of 50 students and learned to work together in a cycle creating and mentoring several projects.

**Competitive Programming** | Online Coding Judges March 2021 - Present

- Maximum Rating of 2051 (5-Star) on Codechef (handle: rochakjain361).
- Maximum Rating of 1753 (Expert) on Codeforces (handle: rochakjain361).

**Volunteer** | National Service Scheme, IIT Roorkee July 2019 - April 2020

- A dedicated member of Exam Education Cell of NSS, IIT Roorkee.
- Tutored underprivileged students to prepare them for various competitive and entrance examinations like Joint Entrance Examination and Navodaya Examination conducted by Govt. of India.

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## References

### Vinod Pankajakshan

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### Vishvendra Singh Poonia

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