

# Abhishekh Kumar Singh

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Final Year, RG IPT | +91-6294213082 | Chittaranjan (W.B), India  
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## EDUCATION

### RAJIV GANDHI INSTITUTE OF PETROLEUM TECHNOLOGY

B.Tech in Information Technology  
Cum. GPA: 7.84 / 10.0  
Dec 2021-25 | Jais, U.P.

### DAV PUBLIC SCHOOL (PCM+CS)

Class 12th, Score: 86.7%  
Batch of 2020 | Rupnarayanpur, W.B.

### KENDRIYA VIDYALAYA

### CHITTARANJAN (Science)

Class 10th, Score: 89.4%  
2018 | Chittaranjan, W.B.

## LINKS

LinkedIn:// [abhishekh9](#)  
Github:// [aksweb](#)  
LeetCode:// [aks01](#)  
Codechef:// [abhishekh786](#)  
Portfolio:// [abhishekh](#)

## COURSEWORK

### UNDERGRADUATE

Data Structures and Algorithms  
Database Management System  
Operating Systems  
Computer Networks  
Cloud Computing  
Deep Learning  
Linear Optimization

## TECHNICAL SKILLS

Languages: C++, Python, JavaScript  
Backend: Node.js, Express.js  
Frontend: React.js, Tailwind CSS  
Databases: MySQL, MongoDB  
DevOps: AWS, Docker  
AI/ML: Image processing, Deep Learning, CNN, RNN

## P.O.R

### RG IPT ACM SC | Technical Head

Managed RG IPT ACM SC website and conducted various technical and fun events for juniors.

## EXPERIENCE

### ALGOUNIVERSITY | SDE Externship | [Deployed Link // cppjudge.in](#)

May 2024 - Present | Remote

- Build an Online Judge, allowing users to host and attend **programming contests**.
- Implemented 3 languages support (C++, Java, Python) for code submission.
- Developed features like Attending **Live Contest**, **Dashboard** to view **contest history**, **submission verdict** and **submitted code** using **MERN stack**.
- Deployed on AWS EC2, and allowed users to run their code safely by providing code **isolation** through Docker and Containerisation.
- Learned about system design and working using High level and Low level Design.
- Currently testing with live users to monitor **EC2 server load**, and getting feedback.

### FEYNN LABS | Machine Learning Intern

Aug 2023 – Oct 2023 | Remote

- Conducted research on Online Vehicle/Cab Booking market using 7 step market segmentation approach to **identify regions of new business opportunities** to increase company's market reach.
- Used **Statistical and Machine learning techniques** to generate and analyse the report.
- Created a detailed **report** indicating the region of high need for such services across **various cities** of India.

*Skills-* Statistical data analysis, Scikit-learn, Market Segmentation and Targeting.

## PROJECT

### NAZAR: Developed an alert system for monitoring of Public/Privately owned security cameras. | Dec 2023 – Jan 2024 | [GITHUB LINK: NAZAR](#)

(Rajasthan Police Hackathon Finals 2023)

- Created a robust **pipeline** for the monitoring system using various types of specialized cameras as per the monitoring area requirements, also ensuring that this new pipeline is also **compatible for the already placed cameras**.
- Through **geo-tagging** the camera is registered, the police admin can **remotely access the CCTV** using a web panel created using **Node.js, Flask and Django**.
- Created an automatic Vehicle tracking system using **ANPR detection** using **YOLO ML model**, since we need **single shot object detection** model.
- This resulted in reduced **response time** of police and **increased efficiency** to catch the suspect.

## PUBLICATIONS

### 15th IEEE Conference on Computing Communication and Networking Technologies (ICCCNT 2024) | Area: Data Control System in Cloud Fog Environment. [Access here](#)

- Implemented M/M/1 queueing algorithm to optimize data offloading between fog and cloud computing environment.
- Results for 1000 IOT tasks processing at configuration of 11th Gen Intel i7 @2.50 GHz, 32GB RAM, Win 10 OS with 10, 20, 30, 40, 50 VMs: **5.9% decrease in Avg. Waiting Time** of the tasks. | Almost saving **85% of one VM** resource wastage in each.

## ACHIEVEMENTS

- Reached to the Finals of Rajasthan Police hackathon (India's largest Cyber hackathon organized by Police) 2023.
- CodeChef Global Rank of 635 in Starters 127 D3
- Jee Advanced 2021: Qualified and ranked among top 2%.
- Jee Mains 2020 : 94.5%.