# Akarsh Singh

## **Technical Skills**

Languages: C++, JavaScript, TypeScript, SQL, Java, , HTML, CSS.

Technologies: React.js, Node.js, Express.js, MongoDB, MySQL, Restful APIs, Redux. Cloud & DevOps: AWS (EC2, S3, RDS, Lambda, IAM), Docker, Kubernetes, Github.

Concepts: Data Structures and Algorithms (DSA), Operating Systems, OOPs, DBMS, Computer Networks, System Design,

Multithreading & Concurrency.

#### Education

Motilal Nehru National Institute of Technology Allahabad

Bachelor of Technology in Electrical Engineering (CGPA: 7.54 / 10.00)

Academic Global School

Intermediate Score: 95%

Expected Jun 2025 Allahabad, Uttar Pradesh Jun 2020 Gorakhpur, Uttar Pradesh

# **Coding Platforms**

Solved 800+ Problems with a 1900+ rating on Leetcode Profile Link

Solved 400+ Problems on platforms like Codeforces, GeeksforGeeks and Codeforces Link

Achieved a 3-Star Rating on Codechef with a Max Rating of 1624 Profile Link

### **Achievements**

 Hackathon Winner - CircuitBuzz (Avishkar): Secured 1st place in an electrical engineering hackathon by excelling in a domain-specific coding and circuit design assessment, demonstrating analytical thinking, algorithmic expertise, and technical proficiency

- Secured a Global Rank of 700 in Leetcode Biweekly Contest 139 after competing against thousands; earned the **Leetcode Knight Badge**, showcasing strong proficiency in data structures and algorithms.
- Specialist on Codeforces with a rating of 1432, demonstrating competitive programming excellence.

#### **Projects**

Subscription Tracker API | GitHub | Node.js, Express.js, MongoDB, JWT, Arcjet, Upstash

Oct 2024 - Nov 2024

- Secured the API with **Arcjet**, reducing bot traffic by 40% through advanced **rate limiting** and protection.
- Built a subscription management system with JWT authentication and role-based access, improving security by
- Engineered a global error-handling and logging system, reducing debugging time by 35%.
- Automated email reminders using Upstash, increasing user retention by 25% through scheduled notifications.

Shortify | GitHub | Node.js, Express.js, MongoDB, JWT, EJS, Bootstrap

Jul 2024 - Aug 2024

- Developed a robust **URL shortening service**, reducing link lengths by 80% and enabling seamless sharing, boosting usability for end-users.
- Implemented real-time click tracking with MongoDB, providing detailed analytics that enhanced user insights and engagement by 30%.
- Strengthened platform security with JWT-based authentication and route protection, achieving 100% compliance with access control requirements.

## Position of Responsibility

- Project Lead Short-term Load Forecasting using Artificial Neural Networks: Took ownership of the Al-driven project, leading research and development in MATLAB to optimize energy demand prediction accuracy.
- Member Anokhi Pehal: Took initiative to enhance the club's impact by introducing weekend teaching sessions for underprivileged children, shifting the focus from just providing study materials to active learning.