

# Siddhant Singh

[linkedin.com/in/siddhant36](https://www.linkedin.com/in/siddhant36) | [siddhant.singh.jadon.36@gmail.com](mailto:siddhant.singh.jadon.36@gmail.com) | [github.com/siddhant3636](https://github.com/siddhant3636)

[LeetCode](#) | [Codeforces](#) | [CF Contest](#)

+91 8787237960 | [Portfolio](#)

---

## SUMMARY

Full Stack Developer specializing in **backend systems, API optimization, and caching**. Experienced with **Node.js, MongoDB, and Redis**, with hands-on work in **system design, pagination, and performance optimization**. Solved 1500+ DSA problems with strong problem-solving skills.

---

## EDUCATION

### DIT University

*Bachelor of Technology, Computer Software Engineering*

**Dr. Virendra Swaroop Education Centre, Kidwai Nagar**

*ICSE, Science — Class 12: 89% — Class 10: 89%*

Dehradun, Uttarakhand

*Sep 2021 – March 2025*

Kanpur, Uttar Pradesh

*2020*

---

## PROJECTS

**Freshon – Full-Stack E-Commerce Platform** | *Node.js, Express.js, MongoDB, Redis, ReactLive* Admin Github

- Architected a scalable backend using **Redis caching** (ID-list + entity-level caching) to minimize redundant database queries
- Handled **cache invalidation using versioning**, preventing stale data without full cache eviction
- Engineered **cursor-based pagination** aligned with sorting logic, reducing response time from **550ms to 200ms**
- Built dynamic filtering, sorting, and search using optimized **MongoDB queries and aggregation pipelines**
- Added **Redis-based rate limiting** and **JWT authentication** with role-based access control
- Built end-to-end payment workflows using **Stripe and Razorpay**, ensuring reliable order lifecycle management
- Optimized API performance, achieving **60% faster responses** on cached requests
- Validated system scalability with **10k+ dataset testing** using efficient paginated access patterns

**Link – Social Platform** | *Node.js, Express.js, React, Redux, Clerk, SSE, Inngest*

Live Github

- Engineered real-time chat system using **Server-Sent Events (SSE)** for live message updates
- Built scalable **REST APIs** supporting posts, follows, likes, and user relationships
- Integrated background job processing with **Inngest** for asynchronous workflows and notifications
- Applied **Redux and Redux Thunk** for efficient state and async data handling
- Built optimized media pipeline using **ImageKit** for image delivery
- Added email notification workflows using **Nodemailer**

**URL Shortener with Analytics** | *Node.js, Express.js, MongoDB, Redis, EJS*

Live Github

- Engineered a URL shortening service using **Base62 encoding** and unique ID generation
- Built analytics system to track **clicks, geolocation, and device-level insights**
- Applied **Redis caching**, rate limiting, and **idempotency techniques** for high-performance APIs
- Added **session-based authentication** using Redis with secure validation flows
- Built admin dashboard for managing **users and URL lifecycle** (creation, deletion)
- Created public explore page showcasing **trending links** with per-link analytics
- Built analytics dashboard with **last 7-day click trends**, tracking usage patterns and link performance

---

## TECHNICAL SKILLS

**Languages:** JavaScript, SQL, C++, Java

**Backend:** Node.js, Express.js, REST APIs, JWT, Session Auth, Server-Sent Events (SSE), Validation, Middleware

**Databases & Cache:** MongoDB, Redis, Aggregation Pipelines, Caching, Rate Limiting, Cursor-Based Pagination

**Frontend:** React.js, Redux, Redux Thunk, HTML, CSS, Tailwind CSS, EJS

**Concepts:** OOPS, CN, DBMS, OS, System Design, API Optimization, Caching Strategies, Scalability

**Skills:** Problem Solving, Communication, Team Collaboration, Reliable, Critical Thinking, Continuous Learning & Adaptability

**Tools & Integrations:** Git, GitHub, Postman, Cloudinary, ImageKit, Stripe, Razorpay, Multer, CORS, Nodemailer

---

## ACCOMPLISHMENTS

**LeetCode:** 1,130+ problems solved — Max Rating: 1872 (Knight)

**Codeforces:** 300+ problems solved — Rating: 1500+ (Specialist)

**Portfolio:** All projects live with demos and source code at [siddhant36.in](https://siddhant36.in)