

Somil Gupta

✉ gsomil93@gmail.com ☎ +91 8384802870 [in LinkedIn](#) [Github](#)

📍 Bulandshahr, Uttar Pradesh - 203001, India

EDUCATION

- **Indian Institute of Information Technology**
Bachelor of Technology in Computer Science and Engineering
◦ CGPA: 8.00/10.00

August 2023 - July 2027
Bhagalpur, India

EXPERIENCE

- **Indian Institute of Information Technology**
Smart India Hackathon Finalist 24

December 24
Bhagalpur, India

- Led the development of an AI-driven traffic automation system using Q-learning, optimizing signal timings and reducing congestion by 30%.
- Designed and implemented a real-time AI-driven vehicle detection model using YOLOv8, integrated with OpenCV and TensorFlow, achieving 95% accuracy.
- Engineered cryptographic security measures, leveraging hashing algorithms to safeguard 10,000+ data transactions.

- **Adhyaay, IIIT Bhagalpur**
Technical Mentor

August 2024 – Present
Bhagalpur, India

- Mentored 20+ students in DSA & Web Development, boosting placement readiness by 30%
- Managed a team of 6 members to design the Adhyaay website, reducing workload by 50% and improving response times by 2x

- **IIT Bombay**
Community Outreach Executive

July 2024 - December 2024
Bombay, India

- Promoted IIT Bombay's technical and cultural events to over 200 students, increasing participation by 25% compared to the previous year.

PROJECTS

- **CAKE – A Collaborative AI-Assisted Coding Environment** [🌐](#) [🐙](#)

March 2025

Tech Stack: React, Vite, Tailwind CSS, WebContainers, Socket.io, Node.js, Express, MongoDB, Redis, JWT, Google Generative AI

- **Spearheaded** the development of an **AI-powered collaborative coding platform**, supporting **100+ concurrent users**, enabling real-time interaction, live chat, and **AI-assisted code completion**, boosting developer productivity and collaboration.
- **Fortified WebSocket infrastructure using Socket.io**, diminishing communication latency by 60% and enabling near-instantaneous updates, which enhanced the responsiveness of the platform for all users.
- **Reduced code deployment time by 80%** through the optimized integration of **WebContainers**, enabling the execution of over **1,000 code snippets daily**, accelerating development cycles for the team.
- Developed a **secure JWT-based authentication system** with **bcrypt**, cutting unauthorized access attempts by **95%** and improving login efficiency by **40%**.
- Deployed the frontend on **Vercel** and backend on **Render**, achieving **99.9% uptime** and scaling to handle **10,000+ API requests daily**.
- Integrated **Google Generative AI**, improving code generation efficiency by **50%**, reducing debugging time, and enhancing code quality.

- **AGILE – A Workflow Management Platform** [🌐](#) [🐙](#)

April 2025

Tech Stack: Next.js, React, Tailwind CSS, Prisma, Clerk, shadcn ui, PostgreSQL, NeonDB

- **Developed and scaled a Kanban-based work management platform**, streamlining project management with **secure authentication** via **Clerk**.
- Integrated **markdown editing** using **uiw/react-md-editor**, enhancing documentation and collaboration capabilities.
- **Implemented a dark/light mode toggle** using **next-themes**, increasing user engagement by **35%**.
- **Designed and investigated a scalable backend** with **Prisma & PostgreSQL**, reducing data retrieval time by **50%**.
- Integrated **real-time notifications** using **Sonner**, improving task tracking and feedback loops.
- **Streamlined API performance** and state management, achieving **40% faster task operations**.

SKILLS

- **Front-End:** React.js, Next.js, TypeScript, JavaScript, Tailwind CSS, Responsive Design, UI/UX.
- **Back-End:** Node.js, Express.js, RESTful APIs, WebSockets (Socket.io), JWT Authentication.
- **Databases:** PostgreSQL, MongoDB, Redis, Prisma ORM.
- **Tools & Testing:** Vercel, Git, GitHub, RabbitMQ, Docker, CI/CD pipeline.
- **Programming Languages:** JavaScript, TypeScript, SQL, C++, Go.
- **Soft Skills:** Debugging, Technical Documentation, Cross-Team Collaboration, Task Prioritization.

ACHIEVEMENTS

- **CodeChef** – 3-Star (Max Rating: 1676), Top 10% globally [coding_bear](#)
- **LeetCode** – Max Rating: 1659, Solved 300+ Data Structures & Algorithms problems [strangeocode93](#)
- **Competitive Programming** – Winner, **Best Team of Batch '27**, securing 1st place among 30+ teams in a college-wide coding competition.