

SARTHAK GAUD

+91 7089056144 — hi@sarthakgaud.tech — sarthakgaud.tech — linkedin.com/in/gaud

EDUCATION

Jaypee University of Engineering and Technology, Guna

B.Tech. in Computer Science

Aug 2022 – Jul 2026

- **Relevant Coursework:** Data Structures, Algorithms, Databases, Operating Systems, Computer Networks.

INDUSTRY EXPERIENCE

Full Stack Developer Intern

July 2024 – Present

QuantDash — New York, USA (Remote)

- Selected as the **first engineering intern**, working directly with founders in early-stage EdTech startup.
- Optimized **React** hooks and implemented dynamic routing, reducing page load time from **4000ms** to **700ms**.
- Developed embedded AI tutoring system using **LangChain** and **FastAPI**, improving user satisfaction by **20%**.
- Designed and optimized **Supabase** database schema with custom indexing, reducing query time by **28%**.
- Built end-to-end payment infrastructure using **Stripe API** and **OAuth2.0**, with localized updates using webhooks.
- Architected RESTful APIs with **FastAPI**, handling **100+** concurrent requests with **99.9%** uptime.
- Created responsive UI components using **Next.js 14**, **TailwindCSS**, and **Framer Motion** for seamless cross-device experience.
- **Led** frontend architecture decisions and **trained** newly onboarded interns.

TECHNICAL PROJECTS

CrypChain

TypeScript, Express, Socket.IO, OOP

- Engineered a blockchain REST API using **Express.js** with **proof-of-work** consensus algorithm.
- Implemented **Hashcash proof-of-work** system with dynamic difficulty adjustment and **mining rewards** distribution.
- Built crypto wallet infrastructure with **nonce-based transaction verification** and **mining node network**.
- Designed modular architecture using **TypeScript** and **OOP** principles, wrote unit tests and achieved **92%** test coverage.

Bootcamp

TypeScript, Next.js, PostgreSQL, Prisma

- Architected full-stack serverless social platform using **Next.js 14**, **Prisma** and **PostgreSQL**.
- Engineered **recursive commenting system** with infinite nesting comments and real-time updates using **WebSockets**.
- Designed community features with thread-based discussions and user engagement tracking.
- Integrated **Clerk Authentication** with webhooks for real-time user status updates and secure session management.

Dhani

MERN Stack, JWT, Mongoose

- Developed full-stack transaction system with **ACID compliance** using session-bound **MongoDB** transactions.
- Implemented advanced search functionality with debouncing and caching, reducing server load by **40%**.
- Created secure authentication system using **JWT** and bcrypt, ensuring **zero security vulnerabilities**.
- Designed minimalist UI with **React**, **TailwindCSS** and **Shadcn** components, achieving responsive design and ease of navigation.

TECHNICAL SKILLS

- **Languages:** C++, Java, Python, TypeScript, JavaScript.
- **Web Frameworks:** React.js, Next.js, Express.js, Node.js, FastAPI.
- **Databases:** PostgreSQL, MySQL, MongoDB, Supabase.
- **Tools & Technologies:** Docker, Git, GitHub, Prisma, Linux, Vim, Canva.

ACHIEVEMENTS

- Led the **only team from Madhya Pradesh** among **2600+** teams nationwide for Tata Innovant GenAI Hackathon.
- Secured **7th** rank among **500+** participants in annual college coding competition in 2nd Year.