Vinayak Nagar

Education

Bennett University Aug 2022 - May 2026

Bachelor of Technology in Computer Science and Engineering

India

• CGPA: 9.29/10 (expected) — Relevant Coursework: Data Structures, Algorithms, Database Systems, Software Engineering, Operating Systems

Technical Skills

Programming Languages: C++, TypeScript, JavaScript, Python, Java

Frameworks & Runtimes: Next.js, React.js, Node.js, Bun, Express.js, FastAPI Database Management: PostgreSQL, MongoDB, Prisma, MySQL, Redis

Message Queues & Caching: RabbitMQ, Redis, Bull Queue

DevOps & Tools: Docker, Nginx, GitHub, Git, AWS, DigitalOcean, CI/CD, Kubernetes

UI/UX & Design: HTML5, CSS3, Tailwind CSS

Other: Machine Learning, AI Integration, Data Structures & Algorithms, Object Oriented Programming

Projects

DoodleX | Next.js, Node.js, Express, Prisma, PostgreSQL, Turborepo, Docker

Feb 2025

- LiveDemo | GitHub
 - Built a full-stack collaborative drawing platform with AI-powered shape generation supporting 10+ concurrent users per room to create drawings from text prompts with secure JWT authentication.
 - Created and deployed AI drawing generation feature processing 50+ shape requests, enabling users to generate drawings from natural language prompts with custom canvas solution for seamless experience.
 - Architected the backend with WebSockets for real-time data transmission, room management system handling 20+ simultaneous connections with optimized rendering across desktop and mobile devices.
 - Deployed with CI/CD pipelines to DigitalOcean VM using Docker containerization achieving 99%+ uptime and automated deployment processes with 2+ environment configurations.

UpHive | Next.js, Bun, TypeScript, RabbitMQ, Redis, PostqreSQL, Prisma, Docker

Apr 2025

- LiveDemo | GitHub
 - Engineered a distributed website monitoring platform to track uptime and response times in real time with scalable message-driven architecture using RabbitMQ and Redis.
 - Developed a **Bun-based backend** scheduling periodic monitoring jobs and dispatching tasks to worker services handling 1000+ concurrent website checks with fault-tolerant design.
 - Implemented Bull Queue (Redis) for reliable asynchronous processing and automatic retries, ensuring consistent database writes and email notifications via **Nodemailer**.
 - Designed a Next.js dashboard visualizing uptime trends, response times, and historical data with interactive charts and filters for 24h, 7d, and 30d views.

NotedAI | Next.js, Tailwind CSS, Appwrite, Groq AI, CopilotKit, shadcn/ui

Mar 2025

LiveDemo | GitHub

- Architected an AI-powered productivity platform with 15+ React components that automates note-taking, task management, and meeting organization, saving users 1+ hour daily with intuitive user experience.
- Integrated Groq AI API and engineered 5+ intelligent features including automated note summarization, priority-based task management, and contextual AI assistant with <2s response times.
- Designed and implemented a responsive UI/UX using Tailwind CSS and shadon/ui components, delivering dark/light themes and accessibility features across 5 pages with high user satisfaction.

Professional Experience

Full Stack Engineer Trainee

Jun 2024 - Sep 2024

DevsLane

Remote

- Built full-stack applications using **React.js** and **Node.js**.
- Implemented JWT-based authentication and integrated RESTful APIs for seamless data communication.
- Managed MongoDB operations for efficient data handling and storage.

Academic and Extracurricular Achievements

- Dean's List Award: Top 1% ranking with 9.86 SGPA among 1,600+ students.
- Hackkacino Hackathon: Runner-up among 90+ teams in 24-hour campus hackathon.
- DSA Problems: Solved 600+ problems across all difficulty levels on LeetCode and GFG using C++.