

# Vihaan Thatiparthi

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## EDUCATION

### Indian Institute of Information Technology

Bachelor of Technology in Computer Science

SriCity, AP

2022 – On Going (CGPA-8.59)

## POSITIONS OF LEADERSHIP

### Student Life Council

2022 – 2023

IIITS

- Organised 2 Cultural Events and 1 Techno-cultural Fest.
- Demonstrated proactive problem-solving and mediation abilities, enhancing the overall student experience and engagement on campus

### Domain Lead - Google Developer Groups

2024 – Till Date

Ops

## PROJECTS

### OpsManCTF | Next.js, Python, Git, Steganography

2024

- Developed a Bhagavad Gita themed CTF designed to encourage juniors to learn Git version control, including cherry-picking and commits.
- Built a self-hosted website featuring an executable (created using Python and PyInstaller) that pushes user progress to a server to display a live leaderboard.
- Implemented the main application with **Next.js**, embedding hidden levels within Git commits in a GitHub repository.
- Engineered 4 levels employing steganography techniques to conceal keys, with artistic clues drawn from Bhagavad Gita episodes.

### RMDS Prototype | React, Next.js, MongoDB, ShadCN, SSE, RBAC, Recharts

2025

- Developed an unfinished prototype to demonstrate the speed, ease of use, and viability of modern front-end frameworks (React and Next.js) in building a Remote Monitoring and Diagnostics Software interface.
- The live streaming section of the website leverages the recharts library to create real time charts for the SSE event streams.
- Implemented a backend that continuously polls MongoDB for sensor data upon establishing an event stream, utilizing server-sent events (SSE) to push real-time updates.
- Secured API routes with Role-Based Access Control (RBAC), including endpoints for role creation, actor authorization, and leveraging MongoDB's aggregation pipeline to compute statistical inferences from sensor data with caching at specified intervals or on-demand.
- Integrated comprehensive data validation for all backend inputs to ensure robust and secure operations.
- Utilized ShadCN UI components on the frontend to promote modularity and customization, implementing role-based access control across all routes and caching strategies to improve initial load times.

### Colosseum | Next.js, MongoDB, shadCN, Swagger, React, Recharts, GSAP, cursify

2024 – Present

- Developing a comprehensive SaaS game agnostic E-sports tournament hosting platform, built as part of academic requirements in a team of 5 with a primary focus on a rich and responsive UI.
- Integrated Role-Based Access Control (RBAC) on both backend and frontend, and utilized **swaggerUI** for thorough API route testing and documentation.
- Constructed an admin dashboard featuring real-time charts using the **Recharts** library, complete with report functionality and robust admin controls.
- Engineered an engaging landing page employing **GSAP** with scroll-trigger animations to create parallax effects and smooth transitions, enhanced by a dynamic canvas cursor from the **cursify** library.
- Designed and prototyped a monetization feature enabling paid tournaments and sponsor integrations.

## TECHNICAL SKILLS

**Languages:** Java, python, C, C++, JavaScript, TypeScript

**Frameworks:** React, Node.js, Maven, Next.JS

**Developer Tools:** Git, Docker, Kubernetes, Ansible, NeoVim