Thanus Kumaar A

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Education

Bachelor of Technology, Computer Science & Engineering	CGPA: 9.
Amrita Vishwa Vidhyapeetham, Coimbatore	September 2022 - Present
Bachelor of Science, Data Science & Programming	CGPA: 8.35
Indian Institute of Technology, Madras (Online)	July 2022 - Present

Projects

Anokha 2024 React js | Tailwind CSS | GSAP | Figma | GitHub Link

- **Collaborative Development:** Worked with a 7-member team to build a full-stack web app for event registration for our college's Techfest Anokha 2024. Utilized Next.js and Tailwind CSS to create an engaging and responsive front-end user interface.
- **Implemented Frontend-Backend Communication:** Focused on establishing seamless communication between the frontend and backend, handling form validations, and integrating APIs for a robust and reliable event registration system. Managed data flow from backend to frontend and implemented advanced filtering systems.
- **Designed Frontend Components:** Contributed to the design and development of frontend components, ensuring a cohesive and user-friendly interface. Worked on the visual design and user interaction aspects using Next.js and Tailwind CSS.

Quick Attendance Node js | Express | MySQL | Database Design | GitHub LInk

- **Backend Design and Database Development:** Led the creation of a normalized database structure, ensuring efficient and secure data management while adhering to best practices in database design.
- **API Development and Integration:** Developed comprehensive backend APIs for seamless integration with the frontend, facilitating efficient data retrieval and management through robust endpoints.
- **Testing and Documentation:** Excelled in troubleshooting and backend testing, and contributed to detailed project documentation, ensuring a clear understanding of the backend architecture and smooth communication with team members.

AI Study Mate Vue js | Express | Google Bard API | GitHub Link

- **Designed and Developed Backend Infrastructure:** Led the design and implementation of the backend using MySQL, ensuring robust database architecture and efficient data management. Structured the application with modular controllers and routes for maintainable and scalable code.
- **Integrated Google Bard API for Chatbot:** Implemented a sophisticated real-time Q/A chatbot by integrating the Google Bard API, facilitating interactive and personalized learning experiences for users.
- **Extensive Backend Development:** Focused on backend engineering, managing data flow and processing.Ensured seamless integration with the frontend, supporting interactive features and optimizing the application for high performance and reliability.

IoT Network Management System React js | Tailwind | Material UI | GitHub Link

- **Hybrid Data Structure Design:** Created a custom hybrid data structure combining tree and map elements for efficient network topology management with optimized time complexity.
- **Front-End Development:** Developed a user-friendly React.js interface with Tailwind CSS, featuring robust form validations and dynamic network management visualizations.
- **Real-Time Network Visualization:** Implemented interactive network visualizations using D3.js in React, converting backend data into dynamic graphical trees for enhanced real-time monitoring.

Skill Set

Languages and Frameworks: C, C++, Python, Java, MySQL, SQLite, PostgreSQL, JS, HTML5, CSS3, Flask, React.js, Node.js, Tailwind CSS, Express JS, Bootstrap, Next.js, Rust, Tauri

Tools and Technologies: Git, Linux, Figma, Eclipse, Visual Studio Code, Arduino, Postman

Extra-curricular

NSS Volunteering: Coordinated and conducted many successful events of NSS Unit-3 as a coordinator and volunteer. Played key roles such as decision-making, organizing events, coordinating teams, and consolidating the reports.