

Sumit Nalavade

vs.nalavade2003@gmail.com | 469-450-6323 | sumitnalavade.com | [GitHub](#)

EDUCATION

Texas A&M University

Bachelor of Science, Computer Engineering

GPA: 3.83

May 2026

PROFESSIONAL EXPERIENCE

Computer Science Research Intern

June 2023 - Present

Texas A&M University Health Science Center

College Station, Texas

- Contributed to OliviaHealth, a grant-funded project led by Texas A&M Health Science Center, enhancing maternal and familial care.
- Developed a highly intuitive user interface using React.js and TypeScript, empowering users to effortlessly customize preferences and tailor the output to their specific needs.
- Integrated a sophisticated SBERT machine learning model into an API to enable responsive handling of user queries, akin to advanced language models like Chat-GPT and Google Bard.
- Expanded the algorithm's scope by incorporating a broader range of parameters, including user preferences, historical data, and contextual information, to significantly enhance the relevance of the generated output.
- Focused on building a resilient and scalable backend architecture with Python and Flask, facilitating seamless integration with the frontend.
- Streamlined data flow, ensuring data consistency and establishing reliable communication channels between the frontend and backend systems.
- Continuously gathered valuable user feedback and conducted extensive usability testing, utilizing powerful libraries such as Jest and Selenium, to identify areas for improvement and elevate the overall user experience.

Academic Peer Mentor

June 2023 - Present

Texas A&M University

College Station, Texas

- Provided regular, one-on-one peer academic coaching to students who live on campus
- Raised academic expectations with engagement and compassion through programs and services
- Serving as a resource to connect students with programs and initiatives that enhance learning and success
- Partnering with Resident Advisors to foster campus community and feelings of belonging on-campus
- Offer opportunities for academic and personal development within the residence halls
- Held weekly office hours to support students' academic and personal goals

Front-end Software Engineer

June - August, 2022

Crypt Cloud

Austin, Texas

<https://cryptapp.dev/>

- Architected and engineered Crypt's front-end web application, meticulously crafting a robust solution that ensures the secure encryption, storage, and retrieval of user data on the IPFS network, employing the industry-standard SHA-256 and AES block cipher algorithms.
- Revitalized the existing codebase by seamlessly transitioning from the Create-React-App build tooling to the powerful Next.js framework, leveraging its server-side rendering capabilities to deliver exceptional performance, bolster search engine optimization (SEO), and enhance page insights.
- Employed TypeScript to meticulously develop the front-end codebase, prioritizing code readability, modularity, and maintainability. This approach resulted in a highly maintainable codebase, reducing potential errors and improving overall development efficiency.

Project Manager & Lead Developer

August - December, 2022

Aggie Coding Club

College Station, Texas

<https://github.com/aggie-coding-club/12th-rec>

- As a freshman at Texas A&M University, assumed the project manager role for the Aggie Coding Club, leading a talented team of 20+ students in developing a cross-platform mobile app (12th Rec).
- Utilized cutting-edge mobile technologies like React Native and TypeScript, alongside Node.js and Firebase for the backend, resulting in a seamless user experience.
- Diligently imparted comprehensive knowledge and proficiency in essential tools and technologies, such as Git, React Native, TypeScript, and Firebase, ensuring each team member was equipped to contribute effectively to the project's success.
- Conducted regular stand-up meetings to align goals, discuss progress, and provide engaging mini-lessons, fostering continuous growth and skill enhancement within the team.

NOTABLE PROJECTS

Gradual Grades / Frisco ISD HAC API

Python, Next.js, TypeScript, React

[GitHub Repo](#)

- Developed a versatile cross-platform mobile application using React Native, empowering Frisco ISD students to conveniently access their online gradebook data on both iOS and Android platforms.
- Constructed an innovative and efficient serverless REST API, leveraging Python, to extract critical information such as grades, transcripts, and

schedules from the Frisco ISD Home Access Center.

- Revamped the data retrieval process by replacing Selenium web scraping with direct HTTP requests, resulting in a remarkable reduction in response times—from over 30 seconds to under 2 seconds.
- Crafted a comprehensive documentation site utilizing React and Next.js, providing language-specific examples and guidance to facilitate seamless integration with the API.
- Witnessed widespread adoption of the API, with multiple students from various campuses within Frisco ISD incorporating it into their projects, generating hundreds of daily requests.
- Successfully launched the application on both the Apple App Store and Google Play Store, accumulating over 1000 downloads and solidifying its positive impact on student access to essential educational data.

GPT Study

TypeScript, Next.js, React.js, Firebase, Open AI GPT, Tailwind CSS

[Demo](#) [GitHub Repo](#)

- Built an online platform for students to generate comprehensive study sets with generative artificial intelligence
- Integrated the Open AI GPT api and the Open AI Javascript SDK to deliver performant and relevant study questions and answers to students
- Built the front end web application with a medley of technologies including Next.js and React.js to deliver a highly interactive user experience along with TypeScript for code safety and maintainability and Tailwind CSS for a modern user experience.
- Integrated Google Firebase to handle user authentication through OAuth and email/password verification along with a real-time document database to ensure user data was stored securely and delivered reliability
- Deployed application to the Vercel platform along with a CI/CD pipeline to ensure all updates are immediately reflected to users

VS Code ReadMe Editor

TypeScript, React, VS Code Webview API

[VSCode Marketplace](#) [GitHub Repo](#)

- Built a VS Code extension to create/edit ReadMe files without having to leave a project workspace.
- Integrated a full React application with TypeScript within VS Code using webpack and the VS Code Webview API
- Added custom components and templates to speed up and advise a user on the ReadMe creation process.
- Integrated with the JavaScript filesystem module to download the created ReadMe directly into the project
- 10,000+ downloads on the VS Code extension marketplace