KAVISH SONINGRA

kavish.soningra@tcu.edu | http://www.kavishsoningra.com | https://github.com/Kavish2040 | 6823760944

EDUCATION

Texas Christian University, Bachelors of Science in Computer Science (**Full Tuition Scholarship & Dean's List**)   *Aug 2022 - May 2026*
- **Relevant Coursework:** Algorithms Design, Artificial Intelligence, Data Structures, Unix/Linux Administration, Java and Python Programming, Computer System Fundamentals, Database Sys., Object Oriented Programming, Linear Algebra, Discrete Math

WORK EXPERIENCE

VACCINITYAI (STARTUP) , Software Engineer | *Fort Worth, Texas, TX*   *July 2024 - Present*
- Developed end-to-end platform to accurately match patients with clinical trials using Next.js, React, Node.js, Express, & Firebase
- Engineered an AI-powered system utilizing the ClinicalTrials.gov API, spaCy, & GPT-4 for NLP to match patients with appropriate clinical trials based on medical history and preferences, resulting in 30% faster data processing & 20% more accurate trial data
- Added user management with Clerk, secure repositories for medical history, and interactive live chat feature with healthcare professionals; Enabled timely clinical trial notifications via Firebase Cloud Messaging, and Stripe for secure payment processing
- Boosted operational efficiency by 20% through creation of an analytics dashboard to visualize health data & clinical trial history; Fine-tuned Claude model to improve matching accuracy, also reduced API calls by 50%; Used Git, GitHub, & CI/CD pipelines.

HEADSTARTER, Software Engineering Fellowship | *Remote*   *June 2024 - September 2024*
- Successfully built five AI projects in seven weeks, employing agile methodologies with weekly sprints & CI/CD practices
- Developed an advanced voice support agent in Python for PAM AI, leveraging Deepgram for real-time voice recognition, and integrated a custom RAG pipeline using a custom vector database that responds based on a company's knowledge base

INTRODUCTION TO COMPUTER NETWORKS, Grader (3000-Level Course) | *TCU, TX*   *Jan 2023 - May 2023*
- First freshman to grade a 3000-level course in Computer Networks, managing a technical help desk for 40+ student
- Evaluated over 300 assignments and exams, providing detailed evaluations and feedback on student assignments covering Data transmission, network protocols, internetworking, security, and network applications such as email, WWW, and FTP

COMMUNITY SERVICE

OFF THE BATTLEFIELD FOUNDATION (OBF), Founding Member & CTO | *Gainesville, FL*   *October 2023 - Present*
- Developed a web application for Off The Battlefield, 501(c)(3) nonprofit connecting war veterans with college students worldwide
- Spearheaded the University of Florida Chapter and The Ukraine Rebuilding Initiative, collaborating with the Mayor of Nizhyn, Ukraine; Featured: University of Florida Television

PROJECTS

SNAPSTUDY, AI Flashcards Generator Application | Github   *June, 2024*
- Developed a full-stack app with React.js, Node.js, and Firebase to create AI-powered flashcards from text & handwritten images.
- Implemented user authentication using Clerk, integrated secure payments with Stripe API, and added features for storing flashcards linked to notes, allowing on-demand retrieval and export in formats like PDF and CSV.
- Integrated GPT-4o-mini for content generation and Tesseract.js for OCR to process diverse inputs, along with Web Speech API for Text-to-Speech, improving accessibility and engagement for auditory learners

HOGWARTS ARTIFACTS ONLINE, Backend Application | Github   *Feb, 2024*
- Spring Boot (Java Framework) Application for the collection, display, or management of artifacts from the Harry Potter Universe.
- Built web layer with Spring MVC and automated CI/CD pipelines with GitHub Actions for Maven builds and Azure deployments.
- Implemented user authentication and authorization with Spring Security and JWT; Developed dynamic API endpoints and integrated advanced configurations using Spring Data JPA & Spring Cloud Azure

DISTRIBUTED LOAD BALANCER, Network Efficiency Solution   *Sept 2024 - Present*
- Coded a high-performance load balancer in C, leveraging multi-threading and TCP/IP socket programming to optimize traffic distribution across server clusters; implemented advanced routing algorithms and dynamic server registration
- Utilized concurrency control techniques for multi-core systems and designed real-time data management protocols for distributed networks, resulting in 40% faster response times and 30% increased system capacity

TCUGPT, Chatbot (**100+ Real Users**) | Github   *May, 2024*
- Developed a chatbot with Next.js to address TCU related queries with OpenAI API integration, deploying it on AWS EC2 servers
- Created a YouTube transcript processing feature that analyzes video content in real-time, enriching chatbot responses.
- Engineered a web scraper using Puppeteer and Axios to extract Rate My Professor data and insert it into a Pinecone Vector Database index, leveraging LangChain for Retrieval Augmented Gathering and enabling live browsing with Google Search Query API, resulting in a 70% improvement in data retrieval speed and a 30% increase in answer accuracy.

SKILLS SUMMARY & ADDITIONAL INFORMATION

PROGRAMMING LANGUAGES: Java, Python, C, C++, PHP, Javascript, HTML & CSS, SQL
FRAMEWORKS AND LIBRARIES: React, Next.js, Node.js, Express.js, Spring Boot, Django, Vue.js, Bootstrap, Material UI, Chakra UI
DATABASES, DEVOPS, & TECHNOLOGIES: MySQL, Firebase, MongoDB, AWS, Azure, Docker, GitHub, Git, Vercel
CAMPUS INVOLVEMENT: VP - Robotics and AI Club, President - Asian Intercultural Association, Student Government- CSE Representative