Sugam Panthi

Sugam.Panthi@usm.edu — 601-307-0189 — sugampanthi.com.np
github.com/vein05 — sugam-panthi

Education

The University of Southern Mississippi (Honors College)   Hattiesburg, MS
Bachelors in Computer Science   4.0 GPA

Technical Skills

Languages: Go, Python, C/C++, C#, HTML, CSS, JS
Technologies: Gin, PyTorch, Docker, Tmux, Flask, Git, Linux, Node, LLMs(LLAMA-3, OpenAI, Deepseek)

Experience

AI & ML Intern, Prediction 3D   May 2025 – Present

- Analyzed site data, including images and sensor inputs, to develop predictive models for enhancing safety and productivity using PyTorch.
- Collaborated with a team of 20 engineers to integrate AI solutions into web applications using ASPNet, Node.
- Contributed to data visualization dashboards, providing actionable insights for stakeholders to optimize quality control in construction projects.

Co-Founder & CTO, MagnoliaEd LLC   April 2025 – Present

- Built an AI-powered EdTech platform enabling instructors to create personalized chatbots for their classes using course materials, with role-based dashboards.
- Led full-stack development (Next.js, Firebase, Python), fine-tuned LLAMA-3, and utilized vector embeddings.
- Secured funding($2,500) and multiple startup competition wins; deployed to programs at Universities and Colleges.

UG Research Assistant, The University of Southern Mississippi   November 2024 – Present

- Utilized data analysis, visualization, and LSTM-based predictive modeling on plastic waste in the US; authored methodologies and results for two journal submissions.
- Built a React Native app for recycling plantations for waste transportation using Clerk, MongoDB, and Mapbox.

Backend Intern, Best One Network   February 2024 – May 2024

- Enhanced the payment confirmation API by transitioning from Django to FlaskWSGI for payment confirmation.
- Remediated 2 critical bugs during the testing phase, leading to a 10% reduction in post-deployment issues.

Honors and Publications

- **Pitch Competition: Winner**, Mississippi Polymer Institute   May 2025
- **Hackathon: Winner**, Davidson College   January 2025
- **Hackathon: Winner**, The University of Southern Mississippi   November 2024
- **Research Paper:** A Comprehensive Review of Plastic Recycling in Construction Industry: Challenges and Opportunities in the U.S.

Projects

Deepseek-Go, Team (Link)

- Lead maintainer for the most popular API client for Deepseek in Go with 300+ stars; closed 30+ issues, 15+ PRs.
- Implemented test-driven development for production, CI/CD actions with GitHub Actions, and semantic versioning.
- Developed a custom JSON extractor, token expenditure estimator, and added support for multi-round conversations.

Ripple - 3D Gamified Flashcards, Team (Link)

- Developed a web application for creating, playing, and sharing flashcards in 3D, enhancing study experiences.
- Engineered with a Next.js frontend and Go backend, deployed on Cloud Run with Firebase for database storage.
- Utilized Turborepo for monorepo management, incorporating OCR using Tesseract, text-to-speech using OpenAI.

Cohesion - AI-Based SQL Assistant, Team (Link)

- Developed an AI-powered open-source web application for SQL schema generation; won the hackathon.
- Engineered a custom speed-focused CSV format for mock data analysis, enhancing performance by 200%.
- Created a backend DB testing system using Go, Gin, and Docker for optimized testing and benchmarking.