Suyog Chaulagain

Denton, TX | (210) 251 7978 | Suyogchaulagain@my.unt.edu | Github | Personal Website

Summary

Full Stack Engineer with a strong foundation in both backend and frontend development, currently pursuing a degree in Mathematics. Experienced in optimizing ERP/CRM solutions and maintaining database systems during a software engineering internship. Proficient in technologies like React and Django, eager to leverage technical skills to contribute effectively to full-stack engineering projects.

Skills

- Machine Learning, Ruby, Deep Learning, Kubernetes, Linux Kernel, Python, TypeScript, React, Flutter, Computer Vision, C/C++, TensorFlow, PyTorch, SQL, Java, JavaScript, AWS, Next.js, CUDA

Experience

Everest Walk Group **May 2022 - Nov 2022**
Backend Engineering Intern *Kathmandu, Nepal*
- Developed and optimized ERP/CRM solutions, enhancing backend development skills and improving system efficiency
- Created project presentations and reports that supported senior staff in decision-making processes
- Maintained database systems to effectively track and analyze operational data, leading to improved data-driven decisions

Kathmandu International School **Jun 2022 - Jun 2023**
Tutor *Kathmandu, Nepal*
- Mentored over 20 students in Mathematics, resulting in an average grade increase of 30 percentage points through personalized and targeted instruction.
- Helped students develop effective study habits and exam strategies, leading to improved academic performance
- Assisted students with homework using specific curriculum and materials, resulting in better understanding and completion rates
- Organized and conducted tutoring sessions at schools and homes, utilizing scheduling skills to accommodate diverse student needs and improve learning outcomes

Education

University of North Texas **Aug 2023 - Present**
Bachelor of Science in Mathematics | Junior *Denton, TX*
- **GPA:** 3.87

Projects

HR-Audit (Winner, Capital One Finance Track – HackGT 12) devpost.com/software/the-hr-audit **Sep 2025**
Georgia Institute of Technology
- Developed a multi-agent AI system using Mastra to automate fraud detection, and workflow optimization.
- Implemented a CSM architecture to enhance the customer service department, creating a grounded AI support system that outperforms traditional human service.
- Integrated voice-based AI with Twilio and Cedar OS for real-time, personalized customer interactions using NLP and name recognition.
- Built an advanced RAG system for semantic search and intelligent document processing with OpenAI and Gemini.

Automated-Driving Application github.com/seaten779/Automated_Driving **Dec 2024 - Jan 2025**
- Developed an enhanced self-driving car model using NVIDIA's End-to-End Learning framework, integrating dropout layers to improve generalization on smaller datasets.
- Implemented a hybrid system combining steering angle prediction with a YOLO-based segmentation model for precise road object detection and classification.

Drest - "Wearable" AI Pipeline **Aug 2025 - Sep 2025**
- Implemented a high-fidelity 3D human reconstruction pipeline using 3D Gaussian Splatting, processing video frames with COLMAP and ImageMagick for initial Structure from Motion (SfM) and camera pose estimation.
- Fine-tuned a Stable Diffusion (SDXL) model to perform 2D-to-3D garment generation, creating textured and geometrically accurate clothing meshes conditioned on both the user's 3D body model and an input clothing image.
- Developed a unique vectorization process to convert complex 3D Gaussian Splatting models into a tensor embedding, enabling the generative AI to condition its output on the precise geometry of the user's body.

Our Dream Pashupati Clean Campaign Video
- Created an introduction video for the "Our Dream Pasupathi Clean" campaign, effectively conveying the mission and engaging the community through visual