Sai Ravi Teja Gangavarapu

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Summary

Results-oriented Software Engineer with a Master's background in Scalable Systems. Over 3 years of experience in full-stack, mobile, and distributed systems development. Proven ability to architect resilient solutions, integrate complex APIs, and lead teams to deliver high-performance applications. Strong expertise in AI/ML, cloud infrastructure, and optimizing system efficiency.

Technical Skills

Languages	:	Python, C++, Go, JavaScript, TypeScript, CUDA, SQL, HTML
Frameworks/Libs	:	React, React Native, Next.js, FastAPI, Django, PyTorch, TensorFlow, Langchain, Pandas, Numpy, React Query, Redux
Databases	:	PostgreSQL, MySQL, MongoDB, NoSQL, Redis
Dev Tools/Platforms	:	Docker, Kubernetes, AWS, Git, ArgoCD, JIRA, Visual Studio Code
Concepts	:	Distributed Systems, Scalable Architectures, REST API, Microservices, CI/CD, Machine Learning, Deep Learning, HPC, Agile

Experience

Founding Software Engineer — Jul 2024 – Jun 2025
Tapsta — *Remote*

- Architected and developed end-to-end full-stack social rewards mobile application using **React Native, FastAPI, and PostgreSQL**.
- Designed 25+ schema database and optimized client-side operations (caching, debouncing), achieving **30% faster response times** and **40% user retention** by redesigning onboarding.
- Integrated Plaid API and developed REST APIs for secure bank connectivity, enabling automated cashback processing and ACH transfers for **1,500+ users**.
- Orchestrated containerized CI/CD pipeline with **Docker, AWS, and ArgoCD**, reducing deployment time by **70%**.
- Led a team of 3 SDE interns, implementing code review processes that contributed to **30% faster feature delivery**.

SDE Intern — Apr 2023 – Dec 2023
Catalog.fi — *Remote*

- Fine-tuned LLaMA/BERT in **PyTorch** to teach LLMs to use APIs, achieving **90% natural language to API accuracy** and reducing API integration time by **25%**.
- Implemented full-stack crypto analytics platform (**React, FastAPI, Postgres, Pandas, Golang**) with real-time monitoring and a leaderboard microservice, boosting user engagement by **30%**.
- Improved backend performance using **Go and PostgreSQL**, supporting **$150M+** trading volume over 30 days with **20% faster queries**.

Research Assistant — Feb 2024 – Jun 2024
University of Florida — *Gainesville, FL*

- Applied **transformer architectures** for rare disease prediction using genomic models, processing **15,000+ DNA sequences**.
- Developed multi-layer perceptron models using **protein embeddings (ESM3)** for analyzing RNA-binding proteins.

Education

Carnegie Mellon University — Pittsburgh, PA
Master of Software Engineering - Scalable Systems — *Aug 2025 – Dec 2026*

University of Florida — Gainesville, FL
Senior Cert + Masters coursework in Computer Science (Algorithms, UX, Graphics - 4.0 GPA) — *Jan 2024 – May 2024*

Projects

Project RECON *Raspberry Pi, OpenMPI, GlusterFS* Source Code

- Architected 8-node **Raspberry Pi 4B compute cluster** with distributed storage, LDAP authentication, and Slurm job scheduling, serving **400+ students**.

OneAIClick.com *Python, React.js, HuggingFace, PEFT/LoRA* Project Site

- Developed an **LLM fine-tuning abstraction tool** for HuggingFace models, cutting development cycles by **60%** and reducing boilerplate by **75%**.

Achievements and Leadership

- **President, Enigma, the Computer Science Club (2021-2023):** Increased club membership by **40%** (2000+ students) through technical workshops and outreach; collaborated with Ubisoft, NVIDIA.
- **1st Place WaffleHacks 2024 (320+ participants):** Built FlashFocus, a Chrome extension for AI flashcard quizzes using RAG system.
- **1st Place Noderunner Hackathon 2023 (50 teams):** Engineered a distributed cluster implementing Raft consensus protocol from scratch (Python, Flask, Multithreading).
- **Publication:** "Emotion Aligned Music Composition from Sound Fundamentals Using Differential Evolution" – IEEE CEC 24.