

# 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

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

## EXPERIENCE

<b>Founding Software Engineer</b> <i>Tapsta</i>	Jul 2024 – Jun 2025 <i>Remote</i>
<ul style="list-style-type: none"><li>Architected and developed end-to-end full-stack social rewards mobile application using <b>React Native, FastAPI, and PostgreSQL</b>.</li><li>Designed 25+ schema database and optimized client-side operations (caching, debouncing), achieving <b>30% faster response times</b> and <b>40% user retention</b> by redesigning onboarding.</li><li>Integrated Plaid API and developed REST APIs for secure bank connectivity, enabling automated cashback processing and ACH transfers for <b>1,500+ users</b>.</li><li>Orchestrated containerized CI/CD pipeline with <b>Docker, AWS, and ArgoCD</b>, reducing deployment time by <b>70%</b>.</li><li>Led a team of 3 SDE interns, implementing code review processes that contributed to <b>30% faster feature delivery</b>.</li></ul>	
<b>SDE Intern</b> <i>Catalog.fi</i>	Apr 2023 – Dec 2023 <i>Remote</i>
<ul style="list-style-type: none"><li>Fine-tuned LLaMA/BERT in <b>PyTorch</b> to teach LLMs to use APIs, achieving <b>90% natural language to API accuracy</b> and reducing API integration time by <b>25%</b>.</li><li>Implemented full-stack crypto analytics platform (<b>React, FastAPI, Postgres, Pandas, Golang</b>) with real-time monitoring and a leaderboard microservice, boosting user engagement by <b>30%</b>.</li><li>Improved backend performance using <b>Go and PostgreSQL</b>, supporting <b>\$150M+</b> trading volume over 30 days with <b>20% faster queries</b>.</li></ul>	
<b>Research Assistant</b> <i>University of Florida</i>	Feb 2024 – Jun 2024 <i>Gainesville, FL</i>
<ul style="list-style-type: none"><li>Applied <b>transformer architectures</b> for rare disease prediction using genomic models, processing <b>15,000+ DNA sequences</b>.</li><li>Developed multi-layer perceptron models using <b>protein embeddings (ESM3)</b> for analyzing RNA-binding proteins.</li></ul>	

## EDUCATION

<b>Carnegie Mellon University</b> <i>Master of Software Engineering - Scalable Systems</i>	Pittsburgh, PA Aug 2025 – Dec 2026
<b>University of Florida</b> <i>Senior Cert + Masters coursework in Computer Science (Algorithms, UX, Graphics - 4.0 GPA)</i>	Gainesville, FL Jan 2024 – May 2024

## PROJECTS

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### 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

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- **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.