

Syna Gogte

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EDUCATION

University of Southern California

Los Angeles, CA

Master's & Bachelor's of Science — Computer Engineering and Computer Science

May 2026

Relevant SW Coursework: Data Structures & OOP, Algorithms, Operating Systems, Internetworking (CS353), Internet of Things (Distributed Systems), Software Engineering, Linear Algebra, Probability, Discrete Methods

SKILLS

Languages: Python, C / C++, Java, JavaScript, HTML / CSS, SQL

Tools & Frameworks: PyTorch, ReactJS, Flask, REST API, Grafana, Git, GitHub, Linux, Figma

WORK EXPERIENCE

NVIDIA

Santa Clara, CA

Systems Software Engineering Intern

May 2025 – August 2025

- Implemented profile-guided optimizations improving execution speed by 20%, directly contributing to millions in annual revenue savings
- Developed a runtime tracing tool to aid debugging, reducing bug resolution time by 50% and accelerating development velocity

NVIDIA

Santa Clara, CA

System Software Engineering Intern

May 2024 – August 2024

- Enhanced coverage analysis tools by integrating Bullseye coverage data collection into GPU system processes (C), identifying 20% total code coverage
- Implemented and tested GSP-RM coverage collection and clearing functionalities, resulting in a 10% reduction in code bugs

USC ANRG — Autonomous Networks Research Group

Los Angeles, CA

Undergraduate Researcher

August 2024 – Present

- Implementing scheduling algorithms for conditional task graphs, targeting 20% reduction in total makespan vs. baseline algorithms

BMC Software

Santa Clara, CA

R&D Intern

May 2023 – November 2023

- Developed an internal chatbot via Flask API and Python; established POST call with confirmation flow, delivering high-quality production components

USC Viterbi School of Engineering

Los Angeles, CA

Teaching Assistant — CS353 (Internetworking / Networking)

August 2023 – Present

- Supported instruction of networking fundamentals, protocols, and distributed systems concepts to 210+ students
- Held office hours, graded assignments, and led review sessions reinforcing CS353 curriculum

PROJECTS

Fine-tuning LLaMA 3.2-1B

Python · PyTorch · LoRA

- Built a custom PyTorch pipeline with gradient accumulation, mixed precision, gradient checkpointing, and LoRA, reducing trainable parameters to 0.113% of the model
- Achieved >35% lower memory usage and 2x faster training on a single 16GB GPU while maintaining effective model convergence

SqueezeNet Inference on FPGA

Python · SystemVerilog · Quartus

- Implemented full SqueezeNet architecture for inference on an FPGA board including quantization and all modules
- Trained model in Python to obtain weights, then deployed quantized inference directly on hardware

Spotify Song Recommender (IoT)

Python · Flask · Raspberry Pi · Spotify API

- Leveraged Raspberry Pi, Grove sound sensor, and rotary angle sensor to analyze ambient noise and select songs from user's Spotify top tracks
- Achieved 95% accuracy in song recommendations via Python Flask server and Spotify API integration

Restaurant Tracker

Java · HTML/CSS/JS · SQL

- Built a full-stack web app for discovering, saving, and booking restaurants using the Yelp API
- SQL backend for persistent user data; API integration for top-10 results by neighborhood

ACTIVITIES

HackSC Community Lead & HackerXP Member— Organized workshops, speakers, and events for USC's annual hackathon; brought together 500+ students