Spencer Stice

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Education

University of California, Los Angeles (UCLA) - Henry Samueli School of Engineering

Los Angeles, CA

Master of Science in Computer Science

October 2024 - June 2025 (Expected)

Focus on computer architecture and AI/ML, TA for embedded ML IoT class, ML researcher

University of California, Los Angeles (UCLA) - Henry Samueli School of Engineering

Los Angeles, CA

Bachelor of Science in Computer Engineering and Mathematics, GPA 3.901

October 2020 - June 2024

Graduated with honors, IEEE-HKN membership chair, mathematics minor

Coursework: Algorithms, OS, Architecture, DL, Computer Vision, NLP, Blockchain, Game Theory, Graph Theory

Skills

Programming Languages: Python, Java, C++/C, SystemVerilog **Technologies/Concepts:**

- Discriminative + Generative ML: Tensorflow/PyTorch, MLP, CNN, LSTM/RNN, GAN, VAE, Transformers, Diffusion
- Computer Architecture: CXL, Chiplets, RISC-V, Hardware Acceleration
- Blockchain: Byzantine Broadcast/Agreement, PoW, PoS, Smart Contracts, Selfish Mining, Secure MPC

Libraries/Tools: Huggingface, Wandb, Git, Linux, Intel Quartus Prime, Siemens ModelSim

Research Experience

UCLA Large Scale Machine Learning Group (BigML) Lab

Los Angeles, CA April 2024 to Present

- Skills: Nvidia GPUs, LLMS, Multimodal models
 -Researching large model security with regards to fine tuning and SOTA jailbreaking techniques
 - -Working with text only models (LLMs) and multimodal text and image models (LLaVA)

Work Experience

Teaching Assistant: Embedded ML and IoT Lab

Los Angeles, CA

Skills: Embedded ML (NNs in C++ for IoT devices), Teaching

September 2024 - Present

- Ran weekly lab for undergraduate students where they gained hands on experience with NNs in C++
- Explained ML concepts and assisted students in debugging their ML applications

AI Research Intern: Perceptronics Solutions

El Segundo, CA

Skills: Tensorflow, Neural Networks, Control Theory (Kalman Filters), Research

June 2023 - September 2023

- -Conducted review of research papers in search for a potential solution to a location accuracy problem associated with an embedded positioning chip
- Implemented one such paper, improving location accuracy in GPS-denied environments by over 55% using an RNN to perform time series forecasting of the expected location error and correcting for it

Software and DDR5 Memory Engineer Intern: Intel Corporation

Folsom, CA

Skills: DDR5, Python, Genetic Algorithms

June 2022 - December 2022

- -Performed post-silicon validation on server-grade DDR5 DRAM and wrote a genetic algorithm in python to find optimal duty cycle adjust settings to minimize electrical jitter before validating, reducing the average search time by ~80% and discovering settings with ~50% less electrical jitter than previous methods
- -Conducted over 13,000 jitter distribution tests to assess the program's performance potential, leading to the submission of an invention disclosure form at Intel

Selected Project

Quill: ChatGPT-powered Chrome Extension

Skills/Technologies: OpenAI API, Startups

- CEO of 4 person startup building a Chrome extension integrating ChatGPT into the web browser
- Attained over 700 users, pitched to co-founder of Google AdSense and other prominent LA VCs for seed funding

Additional projects can be found in my portfolio at https://spencer-stice.github.io