Thomas Yim

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Education

STANFORD UNIVERSITY Stanford, CA
B.S. in Computer Science 4.1 GPA June 2025
Relevant Coursework: Deep Learning for Computer Vision, Parallel Computing, Conversational Virtual Assistants with Deep Learning, Artificial Intelligence: Principles and Techniques, Design and Analysis of Algorithms, Operating Systems Principles, Number Theory for Cryptography, Cryptocurrencies and Blockchain Technologies, Computer Graphics

LAKESIDE SCHOOL Seattle, WA
4.0 GPA, ACT (36), Math II SAT Subject Test (800), AP CS (5), AP Calculus BC (5), June 2021
AP Physics C Mechanics (5), AP Physics C Electricity and Magnetism (5), AP French (5)

Relevant Experience

GROUNDLIGHT AI Seattle, WA
Artificial Intelligence Intern June 2023 – September 2023

- Deployed pipeline to production to apply uncertainty sampling, query-by-committee, expected gradient length, BADGE, and diversity-based active learning methods to accelerate training of a multimodal model in few label instances. Resulted in up to 7% higher balanced accuracy in 50 examples.
- Redesigned cloud labeler review queue prioritization logic after identifying issues in the prior approach.
- Fine-tuned Mask R-CNN and tested Meta's Segment Anything Model to produce bounding boxes and masks for various industrial tasks then trained classifiers on the masks to solve customer tasks with 98% balanced accuracy.

WYZE Kirkland, WA
Machine Learning Intern June 2022 – September 2022

- Trained random forest, neural network, and logistic regression classifiers to predict which event videos users will click and conducted EDA for model feature selection with Scikit-Learn, Numpy, and Pandas.
- Saved up to 50% on video storage costs by training models and conducting data analysis to power optimizations and design a new storage process. Conducted ETL on datasets using SQL from video info logs in Snowflake.
- Presented to and communicated with team members at daily standup meeting and delivered final presentation to the 20+ members of the AI research and technology team to discuss project and applications.

BLUE CANOE LEARNING Bellevue, WA
Software Engineering Intern June 2019 – August 2019

- Reduced data collection cost by 90% through using AWS to collect and process train data for the phoneme classifier.
- Developed a program in Python to find and process errors helping classifier accuracy in reaching its 95% goal.
- Created a program to test performance accuracy of various phoneme recognition programs.

Projects

GENERATING RAY-TRACED IMAGE APPROXIMATIONS FROM RASTERIZED RENDERS (CS231N)

- Created dataset with rasterized (cheap, inaccurate) and ray-traced (expensive, accurate) image pairs using Blender.
- Trained Generative Adversarial Network (GAN) based on Pix2Pix (UNet) architecture that generated ray-traced approximation with 0.934 MSSIM score. Computed saliency maps from GAN Discriminator.

HUMAN IN THE LOOP CONTENT MODERATION

- Stanford TreeHacks (Hackathon) Privacy, Security, & Safety Grand Prize Winner.
- Built API that uses NLP to detect potentially harmful user generated content and learn from past moderator choices.
- Constructed React front-end where moderators can evaluate and make the final decision on flagged content.

AMERICAN SIGN LANGUAGE (ASL) CLASSIFIER

- Won Grand Champion Prize at WSSEF and Finalist at Intel/Regeneron ISEF for ASL classifier.
- Trained Convolutional Neural Network to translate signs into words with 96.8% accuracy.

RESEARCH WITH PROFESSOR EUGENE BUCKLEY (University of Pennsylvania)

- Built Python program to find placement of stress on words in dictionary of the Kashaya Native American language.
- Created a Python program that discovered hundreds of pronunciation errors/exceptions in the Kashaya dictionary.

Club Affiliations

The Stanford Daily (Managing Editor), Stanford Assoc. for Computing Machinery, Asian American Activity Center (Mentor)

Skills

Languages: Python, C++, C, JavaScript, Solidity **Libraries and Tools:** PyTorch, AWS, Django, SQL, Docker, React