

# Tsung-Han (Hank) Lin

## EDUCATION

**University of California, Los Angeles (UCLA)**  
B.S., Mathematics of Computation

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Los Angeles, CA  
Sep 2021 - Mar 2024

## EXPERIENCE

### Natural Language Processing Group, UCLA

#### Research Assistant

- Developing a multimodal reasoning benchmark integrating temporal and grounding understanding.
- Evaluating large vision-language models (VLMs) for complex cross-modal reasoning.

Los Angeles, CA

Oct 2025 - present

### Machine Discovery and Social Network Mining Lab, National Taiwan University

Taipei, Taiwan

#### Research Assistant

- Collaborated with NVIDIA Electronic Design Automation Research Lab to develop multimodal large language models for physical design, focused on improving design accuracy and automation through image feature engineering.
- Optimized image processing and feature engineering for IR Drop prediction, developed a VLM-based pipeline for feature extraction and evaluation.

Sep 2024 - Sep 2025

### Scalable Analytics Institute, UCLA

Los Angeles, CA

#### Research Assistant

- Evaluated GPT-4's responses to diverse scenarios using prompt engineering, identifying key moral and ethical implications to guide model refinement.
- Developed a video-centric multimodal dataset with image-to-text and segmentation models to extract transcripts and facial expressions from video sources.

Oct 2023 - June 2024

### NeuroLeap Corp.

San Jose, CA

#### Machine Learning Engineer Intern

June 2023 - Sep 2023

- Fine-tuned a YOLOv5 model achieving 92% real-time detection accuracy using custom datasets.
- Designed and implemented a multi-object tracking system with MediaPipe, utilizing gesture-based distance measurement in interactive applications.

## SELECTED PROJECTS

### Dreambooth Stable Diffusion Fine-Tuning

Jan 2024 - Mar 2024

- Fine-tuned a Stable Diffusion XL model using LoRA weights for personalized image generation, implemented Dreambooth incorporating a refiner model to enhance output quality and resolution.

### JokeGPT

Sep 2023 - Dec 2023

- Pre-trained and fine-tuned a 16M-parameter transformer model from scratch, building the training pipeline, handling data preprocessing, and optimizing model architecture and training efficiency.

## PUBLICATION

[1] Zongyu Lin et al., “*V-ALPHASOCIAL: Benchmark and Self-Reflective Chain-of-Thought Generation for Visual Social Commonsense Reasoning*” (**ACL Findings 2025**)

[2] Yun-Da Tsai et al., “*Multimodal Chip Physical Design Engineer Assistant*” (**Under Review - AAAI 2026**)

## SKILLS

### Programming Languages

- Python, C++, Java, MATLAB

### Frameworks

- PyTorch, TensorFlow, Scikit-Learn