Eric Tang

eatang@stanford.edu | 408-410-3070 | 🖸 /erictang000 | in /erictang000 | 🖸 erictang000.github.io

EDUCATION

Stanford University

M.S. in Computer Science, Artificial Intelligence

GPA: 3.9 / 4.0

September 2022 - June 2024

University of California. Berkeley

B.S. in Electrical Engineering and Computer Science

August 2018 - May 2022

EXPERIENCE

GPA: 3.82 / 4.0

TikTok June 2023 - Present

Research Intern, Computer Vision and Graphics - Intelligent Creation

• Model owner for live effect recommendations - improved model architecture, multitask performance, and feature engineering for deep learning model being deployed directly to the TikTok app.

Stanford Vision and Learning Lab

Jan 2023 - Present

Graduate Research Assistant

• Investigated parameter efficient fine tuning methods for video action recognition and action anticipation with Vision Transformers. Advised by Prof. Juan Carlos Niebles

May 2022 - August 2022

Software Engineering Intern, Ads Core ML Modeling

• Designed, implemented, and evaluated a novel architecture change for scaling ads ranking models across Instagram and Facebook using PyTorch and Caffe2. Change now included in production package for online models.

Berkeley Artificial Intelligence Research

August 2020 - May 2022

Undergraduate Researcher

• Worked on predicting emotional responses to video, and benchmarking performance of large language models on challenging math problems under Prof. Dawn Song and Prof. Jacob Steinhardt. Published two papers in the NeurIPS Datasets and Benchmarks Track, one of which was co-first authored

Accenture Labs June 2020 - August 2020, June 2021 - August 2021 Technology Research Intern, Systems and Platforms Team

- Summer 2021: Built data pipelines and machine learning model serving APIs for a knowledge graph based digital twin platform using Apache Nifi, Stardog, Docker, and BentoML. Work resulted in a pending patent.
- Summer 2020: Designed software for generative design on warehouse layouts using Bayesian black box optimization and graph algorithms in Python.

PUBLICATIONS

How Would The Viewer Feel? Estimating Wellbeing From Video Scenarios ✓ NeurIPS D&B 2022 M. Mazeika*, Eric Tang*, A. Zou, S. Basart, D. Song, D. Forsyth, J. Steinhardt, and D. Hendrycks.

• We introduced two large-scale video datasets for predicting how videos would effect the emotional state and wellbeing of viewers, and evaluated state-of-the-art video transformer models on them. We found that models pretrained on action recognition tasks generalized well to predicting wellbeing and emotion. Selected for a featured paper presentation at NeurIPS '22.

Measuring Mathematical Problem Solving with the MATH Dataset 🖸 NeurIPS D&B 2021 D. Hendrycks, C. Burns, S. Kadavath, A. Arora, S. Basart, Eric Tang, D. Song, J. Steinhardt

• We collected 12,500 competition math problems, and found that GPT-3 models attained only 5% accuracy, with performance increasing slowly, even with scaling model size and pretraining.

SKILLS

Programming: Python, Java, C/C++, SQL, OpenMP/MPI, CUDA, Docker, AWS, Flask, Git Machine Learning: PyTorch, Keras/Tensorflow, NumPy, PyTorch Lightning, Slurm, Transformers, PyTorch Distributed Select Coursework: Berkeley: CS 182 - Deep Neural Networks, CS 189 - Machine Learning, CS 194-26 -Computational Photography, CS 194-80 - Full Stack Deep Learning, CS 267 - Applications of Parallel Computers, CS 285 - Deep Reinforcement Learning, CS 280 - Computer Vision, CS 288 - Natural Language Processing; **Stanford:** CS 237A - Principles of Robot Autonomy I, CS 330 - Deep Multi-Task and Meta Learning, CS 265 - Randomized Algorithms and Probabilistic Analysis, CS 224W - Machine Learning with Graphs, CS 329D - Machine Learning under Distribution Shifts