

Eric Tang

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

BS IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

AUGUST 2018 - MAY 2022

GPA: 3.82 / 4.0, Major GPA: 3.92 / 4.0

EXPERIENCE

ACCENTURE LABS

JUNE 2020 - AUGUST 2020, JUNE 2021 - AUGUST 2021

Technology R&D Intern

- **Summer 2021:** Built data pipelines and machine learning model serving APIs for a knowledge graph based digital twin platform as part of the Systems and Platforms R&D Team. Work resulted in a pending patent.
- **Summer 2020:** Designed software for generative design on warehouse layouts using Bayesian black box optimization and graph algorithms with the Systems and Platforms R&D Team.

UNIVERSITY OF CALIFORNIA, BERKELEY

JANUARY 2020 - PRESENT

Lead Software TA for CS 61B - Data Structures

- Worked as lead software infrastructure TA to help develop course autograder software ASAG, course grading tool Beacon, and various student facing debugging tools, each serving over 1000 students per semester.
- Manage small team of newer TAs in use and development of course infrastructure and software engineering workflows.

RESEARCH

BERKELEY ARTIFICIAL INTELLIGENCE RESEARCH

AUGUST 2020 - PRESENT

Undergraduate Researcher

- Worked on using computer vision action recognition models to predict emotional response and human preferences for ranking video data, and using transformer based models to solve difficult math problems with Dan Hendrycks under Prof. Dawn Song.
- Work resulted in an accepted paper at NeurIPS (Dataset and Benchmarks Track) and a paper in submission.

UC BERKELEY PHYSICS - CROMMIE GROUP

APRIL 2019 - PRESENT

Undergraduate Researcher

- Designed and trained convolutional neural networks in Keras for classification of subdiffusive particle behavior on sparse experimental data, achieving SoTA accuracy of 85% for sparse time series diffusivity classification.
- Modified models for generating novel visualizations for particle tracks using class activations without loss of accuracy, and demonstrated alignment with expected physical diffusive phenomena.

PUBLICATIONS

- [1] D. Hendrycks, C. Burns, S. Kadavath, A. Arora, S. Basart, **E. Tang**, D. Song, and J. Steinhardt. Measuring mathematical problem solving with the MATH dataset. *NeurIPS (Dataset and Benchmark Track)*, 2021.
- [2] D. Hendrycks, M. Mazeika, **E. Tang**, A. Zou, D. Song, D. Forsyth, and J. Steinhardt. How would the viewer feel? estimating wellbeing from video scenarios. *In Submission*, 2021.
- [3] F. Liou, H.-Z. Tsai, A. S. Aikawa, K. C. Natividad, **E. Tang**, A. R. Ethan Ha, K. Watanabe, T. Taniguchi, J. Lischner, A. Zettl, and M. F. Crommie. Imaging reconfigurable molecular concentration on a graphene field-effect transistor. *Nano Letters*, 2021.

SKILLS

Languages: Java, Python, C/C++, Golang, SQL, CSS, HTML, Swift, Javascript

Tools: Git, Linux, XCode, Numpy/Pandas, OpenMP, MPI, Django, CUDA, MongoDB, Flask, Docker, Apache Nifi, AWS

Machine Learning: Pytorch, Keras, OpenCV, Sklearn, CNNs, Transformers, RNNs/LSTMs

COURSEWORK

Undergraduate: Deep Neural Networks, Databases, Machine Learning, Full Stack DL, Optimization Models, Computer Architecture, Efficient Algorithms, Computer Security, Operating Systems, Data Structures

Graduate: Applications of Parallel Computers, Deep Reinforcement Learning