Eric Tang

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EDUCATION

UC BERKELEY

BS IN ELECTRICAL
ENGINEERING AND
COMPUTER SCIENCE
August 2018 - Present |
Berkeley, CA
College of Engineering
Cum. GPA: 3.84 / 4.0
Major GPA: 4.0 / 4.0

COURSEWORK

UNDERGRADUATE

- *Machine Learning
 *Optimization Models
- *Signals and Systems

*In progress

Computer Architecture
Efficient Algorithms
Discrete Math and
Probability
Computer Security
Operating Systems
Data Structures
Multivariable Calculus
Info Devices and Systems
Linear Algebra

SKILLS

PROGRAMMING

Java • Python • C •
Assembly • Golang • SQL
• CSS • HTML • Swift

FRAMEWORKS AND LIBRARIES

Numpy • Pandas • OpenMP • Sklearn • NetworkX • Tensorflow • OpenCV

EXPERIENCE

June 2020 - August 2020 | San Francisco, CA

ACCENTURE LABS | Technology R&D Intern

- Worked on the Systems and Platforms team on a **generative design** project centered around optimizing warehouse layouts using **continuous time Markov Chain** simulations of robotic agents for real time congestion modeling.
- Designed and implemented layout generation, evaluation, and optimization algorithms in **Python** for scoring of the warehouse layouts using graph representations of the space.

RESEARCH

UC BERKELEY EECS - DAWN SONG GROUP

August 2020 - Present | Berkeley, CA

• Working on predicting human emotional responses given visual stimuli with deep neural networks under Dan Hendryks and Prof. Dawn Song.

UC BERKELEY PHYSICS - CROMMIE GROUP

April 2019 - Present | Berkeley, CA

- Assisted in fabrication of graphene based devices for study of diffusive properties at surfaces. Co-author pending publication - Imaging Gate-tunable Molecular Density on a Graphene Transistor
- Worked on Monte Carlo simulations of CTRW and FBM models of atomic scale subdiffusive behavior at device surfaces, and adapted a novel dual polymer transfer method to achieve near-atomically clean surfaces

LBNL MOLECULAR FOUNDRY - RAJA GROUP

Feb 2020 - May 2020 | Berkeley, CA

• Worked on development of ScopeFoundry python library for progress towards autonomous 2D material stacking bot using computer vision.

TFACHING

CS 61B - DATA STRUCTURES | TEACHING ASSISTANT

January 2020 - Present | Berkeley, CA

- 3x TA for Data Structures. Teach weekly sections, hold office hours, for course of 1500 students. Develop and maintain course autograder software **ASAG**.
- Helped students learn fundamental data structures such as linked lists, binary search trees, red-black trees, heaps, hashmaps, tries, and graphs. Also taught graph traversals, runtime analysis, sorting algorithms, dynamic programming, bit manipulation, and basics of NP-completeness

PROJECTS

THE DAILY CAL APP

Winter 2020 | Xcode, Swift, Alamofire

• Integrated the Daily Cal website's **REST** API backend into an iOS app using **Alamofire** and **Swift**. Currently in beta with planned release in Fall 2020.

PINTOS OS | OPERATING SYSTEM

Spring 2020 | C

• Designed and implemented a file system, userspace programs + syscalls, scheduling algorithms, user space allocator, and synchronization primitives in a team of four