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
*Digital Design and ICs
*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 • LATEX • Assembly • Golang • SQL • CSS • Swift

FRAMEWORKS

OpenCV • Keras • Tensorflow • Numpy • Pandas • OpenMP

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

LBNL MOLECULAR FOUNDRY - RAJA GROUP | RESEARCHER

Feb 2020 - Present | Berkeley, CA

- Created a library of tools for use in the **ScopeFoundry** package to assist in implementation of fully autonomous 2D material stacking bot.
- Implemented graphene monolayer classification using code based off of Mask R-CNN in **Python** using **TensorFlow** and **Keras**

CROMMIE GROUP | RESEARCHER

April 2019 - July 2020 | Berkeley, CA

- Assisted in fabrication of graphene based devices for creation of synaptic memristor for **neuromorphic computing** applications
- Worked on digitizing the parameterization and data collection process for graphene growth and device annealing, and adapted a novel dual polymer transfer method to achieve near-atomically clean surfaces

TEACHING

CS 61B - DATA STRUCTURES | TEACHING ASSISTANT

January 2020 - Present | Berkeley, CA

• 3x TA for Data Structures. Teach weekly sections, hold office hours, and prepare/develop course material for a course of roughly 1000 students.

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**.

SECURE FILE STORE | SHARED FILE STORE IN A MALICIOUS SETTING

Spring 2020 | Golang

• Provides secure upload/download functionality, hierarchical sharing/revocation, and efficient updates to large files.

PINTOS OS I 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

DUCKIETOWN | SELF DRIVING CAR SIMULATOR

Fall 2019 | Pytorch, Sklearn, Numpy

• Used a driving simulator to program a simulation of a self driving car with integration of image processing and segmentation, object detection, and trajectory optimization.