# THEODORE TRAN

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# **EDUCATION**

# University of California, Berkeley | May 2020

GPA: 3.75/4.0

- Bachelor of Arts(B.A.) in Computer Science
- Industrial Relations officer for Upsilon Pi Epsilon(CS Honors Society)
- Completed Coursework: Data Structures, Efficient Algorithms, Computer Architecture, Computer Security, Convex Optimization Models and Applications, Discrete Mathematics and Probability, Linear Algebra
- Current Coursework: Artificial Intelligence, Machine Learning, Probability and Random Processes

# **EXPERIENCE**

# Illumio | Software Engineering Intern

June 2018-Present

- Implemented an API to allow users to squelch/hide network traffic flows from Illumination map based on versatile rules set by the user
- Stored traffic data in Redis efficiently by compressing overlapping rules to save space and allow quicker lookup
- Designed API to be able to extend to future node types rather than just workloads, virtual servers, and IP Lists

#### Berkeley Institute of Data Science | Undergraduate Researcher

June 2017-Present

- Developed an OSS DevKit to increase efficiency for open source contributors to scikit-image
- Created a command line interface for Github for manipulating pull requests using Python libraries such as Click and PyGithub to improve command line workflow and using Travis CI for continuous integration testing

#### **UC Berkeley Sociology Department |** Data Science Developer

June 2017 -October 2017

- Integrated a data science project into Sociology 130AC course using Jupyter Notebooks, NumPy and pandas
- Analyzed social disorder in nearby census tracts by crowdsourcing student data using simple linear regression

#### UC Berkeley EECS Department | Tutor/Reader

January 2018-Present

• Help students with concepts and grade homework for CS170(Efficient Algorithms) and CS70(Discrete Math)

#### **PROJECTS**

#### File Share (Python)

- Developed a secure efficient file sharing client using a malicious storage server and trusted public key server **BearMaps** (Java)
- Constructed the back end of an app to compute the best path between locations in Berkeley **Yelp Camps** (Full Stack)
- Devised a website that crowdsources campground reviews using Node.js, Express.js, and Mongoose
  Num-C (C)
  - Implemented a version of NumPy that sped up matrix operations 50x compared to a naive implementation using SIMD, OpenMP, and other performance techniques

#### Database System (Java)

• Designed and coded a basic database system from scratch that uses a domain language similar to SQL

#### EXTRACURRICULAR ACTIVITIES

#### Cal Table Tennis | Head Coach, Silver Medalist Collegiate Team in USA

Aug 2016 - Present

• National Men's Doubles Champion, North American Team Champion, National Collegiate Regional Champion

#### SKILLS

Languages and Tools: Python, Java, C, Ruby, SQL, Git, HTML/CSS/Javascript