# Brian Fu

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https://github.com/brianfu9

## EDUCATION

### University of California, Berkeley    2017-2021

**Computer Science/Applied Mathematics**

Classes: Data structures and Algorithms, Machine Structures, Computer Architecture, Discrete Math, Probability Theory

Research: Computational Game Theory under Daniel Garcia

## WORK EXPERIENCE

### Cal/Amp Corp. — *Software Engineering Intern*

**SUMMER 2018**

Used deep learning neural networks to classify make/model/year of vehicles based on CAN protocol engine data. Developed a microservice to snap a list of geo-coordinates to mapped streets using A* graph search. Both services hosted through Amazon Web Services.

### Vanguard International Semiconductor — *IT Intern*

**SUMMER 2017**

Developed information collection forms and quality-of-life improvements to the internal company network. Translated documents from Chinese to English.

### National Tsinghua University —*Biochemistry Research Assistant*

**SUMMER 2016**

Performed protein expression and purification of calcium-bound S100A12 proteins on E. Coli samples to prevent uncontrolled cell proliferation. [1][2]

## VOLUNTEERING

### Treasurer, Science Olympiad Club

**2016 - 2017**

Managed a budget of $10,000 for the Science Olympiad team including the purchase of materials, travel expenses, and competition fees.

### Shadetree Nursery, Boy Scouts of America

**OCTOBER 2016**

Raised $600 in funds and material donations and built a 32' by 4' irrigated cinder-block table for the Shade Tree nursery at the University of California, Irvine.

## LANGUAGES

- Java
- C
- Python
- Scheme
- HTML/XML

## INFRASTRUCTURE

- Tensorflow
- Unix
- Docker
- Unity
- SQL/NoSQL

Amazon Web Services
- Elastic Container Services
- Elastic Compute Cloud
- DynamoDB
- Lambda
- API Gateway
- Simple Storage Service

## SKILLS/AWARDS

- Proficient in Mandarin
- MTAC: Certificate of Merit - Piano Level 10
- Boy Scouts of America: Eagle Scout

## INTERESTS

- A Capella
- Hackathons
- Backpacking
- Swim
- Cross Country

[1] Chiou JW, Fu B, Chou RH, Yu C (2016) Blocking the Interactions between Calcium-Bound S100A12 Protein and the V Domain of RAGE Using Tranilast. PLOS ONE 11(9): e0162000. https://doi.org/10.1371/journal.pone.0162000

[2] Zong-Sian Wu, Che Fu Liu, Brian Fu, Ruey-Hwang Chou, Chin Yu (2016) Suramin blocks interaction between human FGF1 and FGFR2 D2 domain and reduces downstream signaling activity. BBRC. https://doi.org/10.1016/j.bbrc.2016.06.149