### **ROBERT ENG**

roberteng.github.io (408) 515-7885 reng@caltech.edu

### **EDUCATION**

CALTECH CLASS OF 2018 Pasadena, CA

**Relevant Coursework:** 

BS in Computer Science

Computer Language Shop C, C++ Tracks, Computer Science Research, Decidability and Tractability (Theory of Computation), Computing Systems, Relational Databases (Ongoing), Discrete Math (Ongoing)

### **SARATOGA HIGH SCHOOL CLASS OF 2014**

Saratoga, CA

**Relevant Coursework:** 

GPA 4.0, WGPA 4.6

**AP Computer Science** 

**National Merit Finalist** 

## **EXPERIENCE**

Donut Developer Summer 2015 - Present

Restructuring Caltech Undergraduate "Donut" website for online student services such as course scheduling, election coordination, housing assignments, directory assistance. Along with five other developers, we are migrating legacy web applications to a standardized Python-based Flask.

# **Caltech Information Management Systems & Services Intern**

**Summer 2015** 

Protected against external cyber-attacks on Caltech's internal network by developing scripts to detect suspicious login activity. Performed security audits on newly deployed applications and troubleshooted network crashes. Researched the traceability of BitTorrent. Notified users of SSID vulnerabilities.

## **Speedy Packets Network Software Intern**

Summer 2015

Tested the fairness and performance of different transport layer protocols such as TCP, SpeedyTCP, and Google QUIC under controlled and real world scenarios – varied packet loss %, packet delay, network load, and bandwidth. Investigated packet captures of video streams and RTS games to find optimal settings for Speedy TCP.

# **CS11 C Track Teaching Assistant**

2015

Assisted professor in teaching the fundamentals of C, particularly the intricacies of plugging memory leaks. Helped students with auxiliary material such as Makefiles, UNIX, and VirtualBox. Graded homework and provided useful feedback.

## **UC Santa Cruz Astronomy Intern**

Summer 2013

Developed an intuitive and interactive Google Maps web interface for deep field galaxy surveys for use by the astronomical community worldwide. With my mentor, authored a research paper describing the conception and development of the project for submission.

## SELECTED PROJECT

PERSONAL WEBSITE 2015

Designed and built a virtual resume at roberteng.github.io to showcase past projects and experience.

# **SKILLS**

Languages: C, Python, Java, C++, PHP, HTML, CSS, Javascript, XML, Bash, Perl Technologies: Node.js, jQuery, Django, AngularJS, Firebase, Socket.IO, MySQL, MongoDB, EJS, JSON, Bootstrap, FlatUI, Google Maps API, Outlook 365 API, Adobe Illustrator