# Alan L. Liu

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### Education

**Yale University**, M. S./B. S. in Computer Science

New Haven, CT 2014-2018

Cumulative GPA: 3.67

Expected Graduation: May 2018

Coursework: Designing Digital Economy, Parallel Programming, Computer Networks, Algorithms, Cloud Networks, Natural Language Processing, Systems Programming, Linear Algebra, Data Structures, Operating Systems

### Experience

#### Google Software Engineering Internship, Project Fi

Mountain View, CA May-August 2017

- Integrated cloud storage for text messages increasing supported devices, load capacity and SMS/MMS message features
- Added Experiment framework into messaging platform enabling statistical A/B tests, controlled feature launches and analysis

#### Fitbit Software Engineering Internship, Device Cornerstone

San Francisco, CA May-August 2016

- Created service to store and deliver weather data to smartwatch, 4th most requested feature, used daily by over 1 million users
- Extended data delivery protocols to support Fitbit Charge 2, increased support for mobile devices and reduced sync times

#### Yale Student Developers Project Manager, Ruby on Rails

New Haven, CT January 2015-May 2017

- Established user testing and feedback guidelines, tripled amount of feedback collected
- Expanded Reservations use to 2 other US universities expanding to over 27 instances supporting over 10,000 users
- Co-Led transition to Vesta, a housing draw application, annually used by all 6,000 undergraduates at Yale

## Leadership

#### YHack Web Leader, Yale Hackathon Organizer

New Haven, CT September 2015-Present

- Designed, created, and maintained Yale Hackathon website, drew over 4,000 undergraduate applicants, 35+ sponsors
- Arranged bussing and transportation arrangements for over 1,000 attendees, lowered costs per attendee by ~30%
- Created interactive day-of website to facilitate mentorship, successfully matched over 90% of students requesting help

#### oVote Lead Web Developer, Social Voting Startup

New Haven, CT May 2016- January 2017

- Attracted 1000+ users from multiple universities including Princeton, Yale School of Management in 3 months after launch
- Allowed SMS texting and messaging large groups of up to 200 simultaneously
- Provided user metrics and response rates to administrative users to quantify engagement

### Awards

#### American Statistical Association Datafest Winner

Middletown, CT April 2017

• Used travel dataset to propose metric-based user targeting strategy increasing annual gross revenue by 1.3 million dollars

#### Chinese Language & Cultural Study - Light Fellowship Recipient

**Beijing, China** June-August 2015

- Examined use cases of popular smartphone applications like WeChat and Didi Taxi among youth and student populations
- Researched needs and pain points of locals in emerging markets in rural Huizhou, China
- Furthered mastery of Chinese language study in Mandarin and simplified Chinese.

### **Hackathon Champion**

#### Various Universities October 2014-Present

- Best in iOS HackPrinceton 2015- Created Google Glass real-time translation subtitles, allowing cross-language speech
- 2nd Place in Hardware HackPrinceton 2016- Enabled an Arduino to be programmed with 8 bit signals from mobile devices
- Best in Amazon Web Services Stanford TreeHacks 2017- Created mood mirror with facial mood and speech recognition
- Best in MongoDB YHack 2014- Built a personal habit assistant to assist medical patients in rehabilitation process
- Top 10 of 300+ PennApps 2015 Developed virtual reality music composer

Mathematics: AIME(American Invitational Math Exam) Qualifier 2012-2013, ARML Qualifier 2012-2014

### **Skills**

**Programming Languages:** Java(experienced), Python (experienced), C(comfortable), Ruby/Rails(comfortable), HTML/CSS (comfortable)

Foreign Languages: English(fluent), Chinese(fluent), Spanish (comfortable)