# CATHERINA XU

github.com/catherinaxu • Stanford, CA • (408) 646-9084 • catherinaxu@stanford.edu • catherinaxu.me

#### **EDUCATION**

## 2014-18 Stanford University

- o GPA: 3.9/4.0, expected Bachelor of Science in Computer Science, minor in Economics
- Coursework: Programming Abstractions, Computer Systems, Contemporary Javascript, Android Development

## 2010-14 Homestead High School

- o GPA: 4.0/4.0, SAT Composite: 2360
- o Valedictorian, USA Biology Olympiad Semi-Finalist, National Merit Scholarship Finalist, National AP Scholar

## WORK EXPERIENCE

## 2015 Visa, Software Engineer Intern – Data Platforms

- Created a multi-way file conversion software that will be used to translate over 500 Canadian Merchant Database (CMPD) files to Visa's standardized merchant repository format
- Utilized Yelp API to gather over 1 million records of restaurant data; clustered location data using Python sci-kit DBSCAN; trained Yelp comment sentiment-analyzer using a naive Bayes classifier and named entity recognition

## 2015 Declara, Growth Metrics Intern

- Analyzed MixPanel and D3Analytics data to evaluate Declara's search algorithm; co-authored a 6-page report that was utilized by the engineering, growth, and product teams
- o Monitored the effectiveness of ongoing marketing campaigns through Google Analytics and Facebook for Business

# 2015 Mobile Innovation Group, Research Assistant

- Collected and analyzed data on Android application popularity, infrastructure, and monetization techniques for over
  235 distinct applications; wrote Python scripts to normalize raw data collected from MixRank API scrapes
- o Presented on how differences in Android / iOS IDEs and platform portability has impacted the mobile market

## 2013-14 Stanford University School of Earth Sciences, Research Assistant

- o Performed DNA extraction, quantification, and PCR reactions in the Francis lab; analyzed data in R to gauge the effects of oceanic warming on Antarctic phytoplankton
- Modeled evolutionary trends by using R to statistically analyze marine organism body-size data

## 2013 Sewa International, Program Analyst Intern

- Contacted and analyzed 9 local non-profits; co-authored a 10-page process handbook that included specifics about volunteer organization and the services that Sewa offers, including medical billing and emergency relief
- Recruited 38 new volunteers at the annual Sevathon Walk through face-to-face pitches

#### **PROJECTS**

- 2015 **UberPrepared, Hack the Planet** SMS/Android interface that allows users to preschedule Uber rides
  - o Used Twilio Messaging, Google Geocoding, Uber API, and natural language processing to implement service
- 2015 My Travel Diary Android app to visually document previous and future travel destinations
  - o Support add, delete, and update of map markers; uses SQLite for persistent storage
- Wake Me Up, Treehacks Pebble/Android app that triggers watch vibrations within a certain radius of destination
  - o Created using Android Studio, CloudPebble, and Google Play Services API, won Dropbox Engineering award
- 2014 CampusBubble, Accenture Hackathon iPhone app with real-time activity updates and bitcoin textbook exchange
  - o Developed in Unity3D and used BitPay/PubNub API to create features, won BitPay API award

## **ACTIVITIES AND LEADERSHIP**

## 2014-16 HackOverflow Coordinator, Stanford University Women in Computer Science

- o Co-organizing the annual HackOverflow hackathon for 100+ attendees in Spring 2016
- o Pioneered "eCSpress yourself", a one-day career exploration conference and panel session for 40 high school girls

## 2015 Equity Analyst, Stanford Blyth Fund

- Pitched Chevron as part of the Energy and Natural Resources coverage group
- o Worked to identify Chevron's growth factors by analyzing the profitability of current exploration projects

# 2013-14 Vice President of Conferences, Future Business Leaders of America (FBLA)

- o Organized the Bay Section Leadership Conference, a high school business conference for 1000+ attendees
- Led 120 students to win CA Sweepstakes Award for top competition performance in business knowledge

## **SKILLS AND LANGUAGES**

**Computer Skills:** C, C++, Python, Javascript, Java, HTML/CSS, Ruby on Rails, MATLAB, R, UNIX, Git, Mercurial **Interests:** Badminton, vocal performance, mobile technology, hackathons, theater (improvisation)