# **DAVID CAO**

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#### EDUCATION UNIVERSITY OF MICHIGAN

Ann Arbor, MI

# **B.S. Computer Science, May 2019**

- Cumulative GPA: 3.73/4.00
- Relevant Coursework: C++ Data Structures and Algorithms, Web Databases
- University Honors: Fall 2015, Winter 2016, Fall 2016

# **EXPERIENCE 2015-2016**

# PHI CHI THETA PROFESSIONAL BUSINESS FRATERNITY

Ann Arbor, MI

- **Technology Chair**
- Redesigned website using WordPress/HTML to create a strong brand and online presence across campus
- Continuously manage and update website to maintain up-to-date information for rushees
- Currently working to create online platform for members that consolidates academic and professional resources

# Summer 2014-2015

#### **ABBVIE PHARMACEUTICALS**

North Chicago, IL

#### **Data Science Intern**

- Used R to program probability density functions using variables measuring arthritis severity (ACR20, ACR70) to help design a clinical trial for arthritis
- Studied clinical trial process to improve understanding of statistical analytics in clinical trials
- Tracked medical device inventories through Microsoft Excel worksheets to ensure safekeeping and reduce medical device overhead costs
- Updated and disseminated informational documents detailing on-going clinical trials to alternate medical site in Germany to ensure an efficient and accurate clinical trial process

# PROJECTS October 2016

#### MHACKS 8

Ann Arbor, MI

# **Android Facial Recognition Application for Visually Impaired**

- Built Android application to provide audible facial-recognition for the visually impaired
- Used Microsoft facial recognition API to identify faces and compute similarities between the query face and all faces in contact list, returning candidate persons ranked by confidence level
- Application used Android text-to-speech to say the name of person(s) in picture
- Enhanced UI and UX to better accommodate the visually impaired

#### 2015-Present

#### BLUELAB

Ann Arbor, MI

### Hagley-Gap & Discovery (Sustainability Projects)

- Hagley-Gap: Prototyped a large scale solar dehydrator which concentrated sunlight to heat air in order to provide a economically-sustainable method to preserve fruits
- Kulisha: Helped build Arduino devices for start-up company to automate data collection process in order to efficiently produce an environmentally-sustainable animal feed

## 2016-Present

### ACCELERATE CS

Ann Arbor, MI

### **Community Service**

- Google CS First program designed to foster computer science interest in young kids
- Engaging with 6<sup>th</sup> graders in after school program every Friday to teach introductory computer science concepts and skills

#### ADDITIONAL

- Relevant Skills: C++ (Advanced), HTML (Basic), JavaScript (Basic), MySQL (Basic)
- Working with a team to develop an Android mobile application that will create an inbuilding, pedestrian navigation system for blind and visually-impaired persons
- ACT: 34, AP National Scholar, 2013 & 2015 ICTM State Math Champions
- Band Board President, Varsity Cross Country, 2015 ILMEA All-State Selectee
- Interests include hip-hop dance, YouTube filmmakers, and soccer