# Christine Zhao

cyz1@rice.edu | 571.789.3311

## **EDUCATION**

#### **RICE UNIVERSITY**

BACHELOR IN COMPUTER SCIENCE Expected May 2022 | Houston, TX

## THOMAS JEFFERSON HS FOR SCIENCE AND TECHNOLOGY

ADVANCED DIPLOMA Sep 2014 - Jun 2018 | Alexandria, VA Cum. GPA: 4.455

## COURSEWORK

#### **COLLEGE**

Computational Thinking Business Communication Statistics for Data Science First-Year German

#### **HIGH SCHOOL**

Concrete Math Multi-variable Calculus Web Applications Development Mobile/Web Applications Research Artificial Intelligence 1/2 AP Computer Science A AP BC Calculus

## SKILLS

#### **PROGRAMMING**

Advanced:

Python • Javascript HTML/CSS • Java

Intermediate:

C# • Unity • Express.js • LaTeX Socket.io • Bootstrap • JQuery • R Familiar:

Visual Basic (VBA) • ArcPy/ArcGIS Android • MySQL • Unix • C++

## HONORS

- National Journalist of the Year
- National Merit Finalist
- AP Scholar with Distinction
- •Winner at Technica Hackathon
- Second Place in MIT Beaverworks Summer Institute Final Competition

## LINKS

Github://czhao028 Devpost://czhao028 LinkedIn://czhao028 Facebook://czhao028

## **EXPERIENCE**

#### **GIRLSTART | STEM CREW PROGRAM LEADER**

BACHELOR IN COMPUTER SCIENCE Sep 2018 - Present | Houston, TX

- Run after-school STEM enrichment programs for 4th-5th grade girls in high-need communities.
- Plan, prepare, and execute biweekly 1-hour lesson plans at local elementary schools. Leads Girlstart at Heflin and Emmerson Elementary.
- Collaborate with co-lead and intern coordinator to gather and organize materials for programs of 30+ girls.

## **CAPITALONE BANK** | DATA ANALYST INTERN

Jun 2018 - Aug 2018 | McLean, VA

- Improved CapitalOne's ability to spot causes of poor associate experience by introducing unsupervised comment analysis techniques. Presentation at People Analytics All-Hands meeting gained a 100% approval rating in post-meeting survey.
  - a Eliminated the need for quarterly manual classification of employee feedback, a previously 30 hr task. Automated techniques required just 15 min. to process 30,000+ comments.
  - b Implemented NLP techniques thru sklearn to enhance company's ability to sort comments into topic categories without introducing human bias
  - c Programmed a summarization tool using TextRank analysis. This tool allows HR to view top comments related to the primary causes of employee disengagement/dissatisfaction.

## ASPIRING SCIENTISTS SUMMER INTERNSHIP PROGRAM | INTERN

Jun 2016 - Aug 2016 | George Mason University, Fairfax, VA

- Compiled an 18-page research paper and developed Flood Information Portal (FIP), a mobile application that alerts users of nearby floods and locations.
- Wrote Javascript scripts within the Cordova mobile app framework to automatically classify NOAA flood warnings/watches and push notifications to users about relevant safety tips and courses of action.
- Researched and implemented: a. the ogr2ogr command line tool, b.

  Visual Basic for Applications (VBA) script, and c. Python packages, such as openpyxl & ArcPy, to transfer real-time weather data into the app.
- Earned a Siemens Competition Semifinalist award for project & paper.

## **PROJECTS**

#### MYVROW | Sep 2017 - May 2018

Developed a virtual reality infinite runner game in Unity to be paired with the rowing ergometer. Experimented with threading to generate random landscapes and C# script/Unity's Bluetooth plugin to read in real-time user speed into the game.

### FOTO BOOTH | Dec 2017 - Jan 2018

Built a web application to allow personalized Facebook album downloads. Set up Express.js server to store user data into mySQL databases. Experimented with Browserify to implement Node.js packages on the client-side, particularly to work with asynchronous Facebook API requests which gathered album covers & pictures.

#### SUBURBIA | Nov 2017

Collaborated with three other high school students to develop a web application that finds the perfect neighborhood based on user preferences for schools, price, age group(s), etc. <a href="Won First Prize">Won First Prize</a> in the Fannie Mae Challenge at the 2017 Technica Hackathon at the University of Maryland.