# AARON YAO-SMITH

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### **EDUCATION**

Cornell University, Ithaca, NY

Intended B.S. in Computer Science, May 2021

GPA: 3.82 of 4.00

Belmont High School, Belmont, MA

Diploma, May 2017

### COURSEWORK

Data Structures & Functional Programming • Discrete Structures • Introduction to Data Science Waves and Thermal Physics, Honors • Electronic Materials for the Information Age • Mathematical Physics

#### **EXPERIENCE**

## Department of Biostatistics, Dana-Farber Cancer Institute

May 2018 - Present Boston, MA

Research Assistant

- · Head author and primary designer/developer of independent research project, under academic guidance
- · Apply statistical tests and analysis to large single-cell RNA sequencing datasets (e.g. Human Cell Atlas) using Python
- · Interviewed and trained new full-time researchers to aid project during academic year, after grant proposal was accepted
- · Abstract was accepted for presentation at Single Cell Genomics 2018 conference, scheduled for October 2018 at the Broad Institute of MIT and Harvard

# AIDE Design Software Team, AguaClara Cornell

September 2018 - Present

Developer

Ithaca, NY

· Parameterize water treatment plant CAD specifications based on water needs of individual Honduran communities, bypassing contractors and reducing cost; decreasing barrier of entry for communities with scarce resources

## Department of Marketing, Northeastern University

May - August 2018

Research Assistant

Boston, MA

- · Developed web interface implementation of psychological study using Python framework
- · Collated specification demands across a large research group with representation from several universities
- · Deployed study to preliminary experiment of 300 subjects
- · Trained new full-time researchers to later deploy to larger audience using Amazon Mechanical Turk

June - August 2017 Addgene InternCambridge, MA

- · Addgene is a nonprofit plasmid repository facilitating exchanges between 3500 research labs worldwide
- · Initiated development of high school level teaching kit aimed at current research topics (e.g. CRISPR)
- · Liasioned with local high schools to collect teacher feedback and improve product
- · Prepared specialized DNA packages in teams for shipment to locations with extreme import regulations

### **SKILLS**

Python (pandas, sklearn) • Unix • Agile • JavaScript • HTML • CSS • Java • C++ • VBA • MATLAB • OCaml

# LEADERSHIP & HONORS

Team 6731, FIRST Robotics Co-Founder and Quantitative Design Lead

> NE District Rookie Inspiration Award, 2017 NE District Rookie All Star Award, 2017 James E. Casey Scholarship Winner, 2017

National Merit Scholarship

WGBH High School Quiz Show Season 8 State Qualifier, 2017

## ACTIVITIES