# 2938 Macomb Street NW, Washington DC 20008 202-280-0731 | za3df@virginia.edu

### **EDUCATION**

# University of Virginia

Charlottesville, VA

Intended Bachelor of Science in Computer Science

Class of 2021

• Courses: Software Dev Methods, Differential Equations, Multivariable Calculus, Physics E&M

Maret School Washington, DC

High School

Class of 2017

• Courses: BC Calculus, Linear Algebra, AP Computer Science A, Physics C: Mechanics

#### WORK & LEADERSHIP EXPERIENCE

# **National Institute of Standards and Technology (NIST)**

Gaithersburg, MD

Intern, Multimodal Information Group

July 2016 - Aug 2016

- Helped to clean and organize traffic data for use in the group's pilot data science evaluation.
- Created an algorithm to match video segments from traffic cameras to specific traffic incidents from millions of police records.
- Gained proficiency in R and ggplot2.

## **Maret Engineering Team**

Washington, DC

CEO, Lead Software Engineer, Programmer

Sept 2013 – June 2017

- Designed and built an underwater remotely operated vehicle (ROV) to compete in the annual MATE competition (https://www.marinetech.org/rov-competition-2).
- During my year as CEO, the team finished in fifth place out of 25 teams, including receiving an award for the best presentation, which I organized and led.
- Wrote the code to communicate between the Mac, Xbox controller and on-board Arduino over serial using Processing and C.

Maret Math Team Washington, DC

Co-Captain

Sept 2016 – June 2017

- Competed in the Arete math competition against other schools across the country (https://aretelabs.com/math\_madness) and led club as we explored various math topics.
- Led the Maret team to its first winning season.

# Cleveland Park Valet, Dry Cleaner

Washington, DC

Counterperson

June 2015 – Aug 2017

- Handled incoming dry cleaning and pickup.
- Handled register and made duplicate door keys for customers.
- Opened and closed store when owner unavailable.

## **SKILLS & ACTIVITIES**

**Software:** Java, C++, Python, R, Processing, C, Matlab, MS Excel and Mathematica

**Activities:** Virginia Men's Rowing, HS Varsity Soccer and Lacrosse

Honors: Top AMC score at Maret for two years (https://www.maa.org/math-competitions/amc-1012),

US Physics Olympiad Semi-finalist (https://www.aapt.org/physicsteam/2018)