

# Derek Yu

SOFTWARE ENGINEER

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## Education

### University of Maryland, College Park

College Park, MD

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.67/4.0

May 2022

- Minor: Statistics
- Academy of Machine Learning
- The President's Scholarship Recipient

## Skills

**Languages** Python, JavaScript, Java, Ruby, OCaml, R, C, HTML/CSS  
**Technologies** React, Redux, Flask, UNIX, SQL, MATLAB, Microsoft Office

## Experience

### MITRE

Remote

SOFTWARE ENGINEER INTERN

June 2020 - PRESENT

- Assisting with front-end web development using React and Redux to create an environment to facilitate information exchange between investment firms, individual companies, and the government
- Creating application to control six different satellite using Flask
- Working on automating the process of identifying satellite by signals using Python and MySQL

### Human-Computer Interaction Lab

University of Maryland, College Park

RESEARCH ASSISTANT

June 2019 - Aug. 2019

- Created a multiplayer, virtual reality application using the Unity game engine and Photon Unity Networking
- Aided in the development of an application to help people with dementia by developing an application that allows for cross-platform interaction between the Oculus Quest and PC

### NASA Goddard Space Flight Center

Greenbelt, MD

INTERN

June 2017 - Aug. 2017

- Participant of National Space Club & Foundation Scholars Program
- Renovated the Electromechanical Systems Branch Database using HTML, CSS, and other tools on NASA's XSpaces platform to make it aesthetically appealing and organized
- Entered and organized past mission files (GEDI, TIRS I, TIRS II) into the database to allow for easy access of vital information

### Social & Scientific Systems

Silver Spring, MD

WEB CONTENT DEVELOPER

June 2017

- Collaborated with tech companies and nonprofits within the field of public health to provide a common format for publishers, easing the exchange of educational, scientific, and medical research
- Converted statistical briefs in HTML and PDF format into Book Interchange Tag Suite (BITS) format, and verified valid XML documents

## Projects

### Fox Sports University Challenge

College Park, MD

PARTICIPANT

Jan. 2019 - May 2019

- Research on the gaming and esports market, players, and fans
- Research on how millennial and Gen Z peers consume and prefer to consume sports
- Develop a well-rounded creative marketing campaign that FOX Sports and Caffeine can utilize together in order to increase awareness and drive usage and engagement to the Caffeine broadcasting platform

### UMD Over Sand Vehicle Project

College Park, MD

PROGRAMMER, FIRE SUPPRESSION TEAM

Jan. 2019 - May 2019

- Worked on a team to build and program an autonomous over-sand vehicle
- Programmed OSV to navigate to within 250 mm of fire site, detect the number of active flames present, and extinguish all flames except for one
- Programmed using Arduino to navigate OSV around obstacles and extinguish flames using ultrasonic and thermal sensors