

EDUCATION

University at Buffalo, The State University of New York Expected May 2021
*Bachelor of Science, **Computer Science**, Software Systems Focus* GPA: 3.97/4.00
*Bachelor of Arts, **Mathematics***

Lorenzo di Medici International Institute Winter 2019
Study Abroad Experience in Florence, Italy

WORK EXPERIENCE

Moog, Inc., *Computer Science Intern* Aug. 2020 - Present
 - Assist in creating an expandable framework for smart vehicles that can be tailored to client needs
 - Utilize Microsoft Azure Internet of Things (IoT) to program telemetry collection modules
 - Implement data structures for data collection and transmission
 - Help create an iOS application to display telemetry data sourced from IoT modules

CyberMed Research Lab, *Undergraduate Researcher* Jan. 2020 – Present
 - Use a ResNet neural network to detect respiratory illnesses such as COVID-19 from respiratory sounds

CytoCybernetics, Inc., *Software Engineering Intern* Aug. 2019 – Jul. 2020
 - Designed, debugged, and tested software, user experiences, and install scripts for several programs
 - Implemented algebraic and differential equations in Python for both analytical and numerical results

Ox Intel, Inc., *Software Engineering Consultant* May 2020 – Aug. 2020
 - Developed a minimum viable product GUI and data storage system for a data collection application
 - Assisted the Ox team in teaching the basics of software development and cloud computing

CSE 220: Systems Programming, *Teaching Assistant* Aug. 2019 – Present
 - Teach in recitation and office hour sessions to assist students
 - Present new ideas for the course in weekly meetings

PROGRAMMING PROJECTS

On-Campus Event Manager Android Application Jan. 2020 – May 2020
 - Worked on a team of three to design an application using the Agile design process
 - Designed the UX for upcoming events, check in, and event creation pages
 - Used XML for front end, Java for backend, and SQL for database

UAV Positioning for a Temporary Network Using a Genetic Algorithm May 2019 – Aug. 2020
 - Conducted a literary review in the research subject area
 - Created a genetic algorithm to optimally place of internet-connected drones to cover a map
 - Performed testing and validation against previously existing solutions

C-Standard Compliant Memory Allocator Apr. 2019
 - Implemented `malloc()`, `calloc()`, `realloc()`, and `free()` for the C programming language
 - Utilized a multi-pool approach for small allocations and a bulk approach for large allocations

TECHNICAL SKILLS

C++	Java	Android Development	Bash	Git/SVN
C	JavaScript	iOS Development	SQL	Microsoft Office
Swift	Python	HTML	Project Management	Agile Dev.

AWARDS

Eng. Honor Society	Dean's List	Grace W. Capen Scholar	Presidential Scholarship
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LEADERSHIP/CO-CURRICULAR EXPERIENCES

Honors Student Council, *Treasurer* Aug. 2019 - Present
 - Plan social and volunteering events for students
 - Manage Honors Student Council funds

University Heights Tool Library, *Volunteer* Feb. 2018 – May 2018

Honors Mentoring Program, *Mentor* Aug. 2018 - Dec. 2020
 - Answer questions about UB and the transition from high school to college

Intramural Soccer and Volleyball, *Participant* Aug. 2017 - Nov. 2019

UB Symphonic Orchestra, *Principal Bassist* Aug. 2017 - Present