ALEXANDER C RUTH
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EDUCATION

University of Maryland, Baltimore County (UMBC) Expected Graduation: May 2020
Bachelor of Science, Computer Science GPA: 4.0
Honors College
University Scholar Merit Scholarship

SKILLS

Programming Languages: C++, Python, Java, Android, HTML, JavaScript, Lua, Scheme
Operating Systems: UNIX, Microsoft Windows, IOS
Software: Emacs/VI editors, Putty, Microsoft Office Suite, Google Drive

ACADEMIC PROJECTS

Maze Solver (Python) Fall 2016

- Developed a program to load and display a file representation of a maze
- Created a recursive function to solve a maze starting at any given location, or determine that a maze is impossible to solve

Garden Simulator (C++) Spring 2017

- Wrote code to simulate a garden populated with varying plants
- Utilized inheritance and polymorphism to create and interact with different plant types, all derived from a general plant class

Truck Delivery Manager (C++) Spring 2017

- Implemented an algorithm for managing the delivery of goods based on inputted files, and the available delivery trucks
- Created a templated queue data structure for use in the manager

In-Browser Scheduler (HTML and JavaScript) Summer 2017

- Created a program that allowed users to input and edit a schedule, and displayed a color-coded schedule table based on their input.
- Used HTML for front end input, and JavaScript to interpret the data and create the schedule table.

SERVICE EXPERIENCE

Cisco Center Volunteer Summer 2017

- Assisted with teaching and childcare of youth with developmental disabilities

Bello Machre Volunteer 2012 - Present

- Participate in activities with developmentally disabled adults
- Support fundraising events

Heritage Greenway Fall 2016

- Assisted with environmental cleanup in local recreation areas

COURSEWORK

- Computer Science I: Python
- Computer Science II: C++ Object-Oriented Programming
- Data Structures: C++ *(Fall 2017)*
- Programming Languages: Lua, Scheme, Java *(Fall 2017)*
- Discrete Structures
- Calculus I & II