

## Education

Chicago, IL	University of Illinois at Chicago (UIC)	May 2022
<ul style="list-style-type: none"><li>• Bachelor of Science in Computer Engineering. GPA: 3.78</li><li>• Undergraduate Coursework: Data Structures; Introduction to Embedded Systems; Introduction to Logic Design, Mathematical Foundations of Computing, Introduction to Differential Equations, Calculus III, Applied Linear Algebra.</li><li>• Filipinos in Alliance: Allstate Hot Chocolate Run 5k/15k; (Self) 34th Annual Hunger Walk</li></ul>		

## Skills

**Software/Tools:** C, C++, Python, Linux, Git, Shell Scripting, SSH, Catch Framework, Valgrind, ARM

## Internships

Research Intern, Co-Op Aide	University of Illinois at Chicago (UIC)	Jun - Aug 2019
gem5 Simulator System <ul style="list-style-type: none"><li>• Developed on an open-source simulation platform for computer system architecture called gem5</li><li>• Established connections between different CPU chip-sets such as ARM &amp; x86 with memory controllers, caches, and interconnects</li><li>• Communicated with an engineering professor and a Ph.D. student on project deadlines</li></ul>		

## Projects

Back-End Navigation, UIC	Apr - May 2020
<ul style="list-style-type: none"><li>- Designed an application that allows the user to observe the back-end functions of loading a map, building a graph, and finding the shortest path between two separate locations</li><li>- Integrated Dijkstra's algorithm to find the shortest path among two points</li><li>- Implemented open-source maps from openstreetmap.org of UIC's East Campus</li><li>- Utilized: Linux, C++, XML, GNU Make, debugged using CLion &amp; VSCode, Valgrind (memory leaks), (data structures) Map, Graph, Stack, Vector, Set. Queue.</li></ul>	
DIVVY Data Hashing, UIC	Apr 2020
<ul style="list-style-type: none"><li>- Developed an application that hashes station and trip data from DIVVY bike-sharing company.</li><li>- Created a hashmap with separate hash functions for over 1500 trips and 580 bike IDs</li><li>- Added multiple commands: search by station id, abbreviation, trip id, bike id, nearby stations, and similar trips</li><li>- Utilized: Linux, C++, GNU Make, Comma-Separated Values, debugged using CLion &amp; VSCode, Valgrind (memory leaks), (data structures) Vector, Hashmap</li></ul>	
Threaded AVL Tree, UIC	Mar 2020
<ul style="list-style-type: none"><li>- Created a general-purpose threaded AVL tree class that dynamically grows that contains insert, copy/construct, print tree, height, rotations, and search keys among a specified range</li><li>- Designed with the notation of each node contains a key, value, left/right pointers, boolean for threading, and height</li><li>- Utilized: Linux, C++, GNU Make, Catch Framework (unit tests), debugged using CLion &amp; VSCode, Valgrind (memory leaks), (data Structures) AVL tree, vector, stack</li></ul>	
Amazon Autonomous Bot, Self	Jul 2019
<ul style="list-style-type: none"><li>- Programmed a web scraping bot that gathers product information on Amazon: price, URL, name</li><li>- Updated spreadsheet with data from initial scrape which sends an email notification to the user</li><li>- Utilized: Python, Google APIs, Google Sheets</li></ul>	
Raspberry Pi Smart Monitor, Self	May 2019
<ul style="list-style-type: none"><li>- Developed through Raspbian OS using open-source code via GitHub (MichMich)</li><li>- Implemented personal calendar, cryptocurrency stock tracker, weather API, date &amp; time, etc</li><li>- Utilized: Linux, JSON, Python</li></ul>	