linkedin.com/in/jim-palomo/
github.com/jimpalomo

JIM PALOMO

(847) 345-2180
jimppalomo@gmail.com
jimpalomo@github.io

Education

Chicago, IL **University of Illinois at Chicago (UIC)** **May 2022**

- Bachelor of Science in Computer Engineering. GPA: 3.78
- 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, (Current) Circuit Analysis, Discrete and Continuous Signals and Systems, Probability and Random Processes for Engineers, Computer Organization, Digital Systems Design.
- Filipinos in Alliance: Allstate Hot Chocolate Run 5k/15k; (Self) 34th Annual Hunger Walk

Internships

Research Intern, Co-Op Aide **University of Illinois at Chicago (UIC)** **Jun - Aug 2019**

gem5 Simulator System

- Developed on an open-source simulation platform for computer system architecture called gem5
- Established connections between different CPU chip-sets such as ARM & x86 with memory controllers, caches, and interconnects
- Communicated with an engineering professor and a Ph.D. student on project deadlines

Projects

Back-End Navigation, UIC **Apr - May 2020**

- 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
- Integrated Dijstrakia's algorithm to find the shortest path among two points
- Implemented open-source maps from openstreetmap.org of UIC's East Campus
- Utilized: Linux, C++, XML, GNU Make, debugged using CLion & VSCode, Valgrind (memory leaks), (data structures) Map, Graph, Stack, Vector, Set. Queue.

DIVVY Data Hashing, UIC **Apr 2020**

- Developed an application that hashes station and trip data from DIVVY bike-sharing company.
- Created a hashmap with separate hash functions for over 1500 trips and 580 bike IDs
- Added multiple commands: search by station id, abbreviation, trip id, bike id, nearby stations, and similar trips
- Utilized: Linux, C++, GNU Make, Comma-Separated Values, debugged using CLion & VSCode, Valgrind (memory leaks), (data structures) Vector, Hashmap

Threaded AVL Tree, UIC **Mar 2020**

- 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
- Designed with the notation of each node contains a key, value, left/right pointers, boolean for threading, and height
- Utilized: Linux, C++, GNU Make, Catch Framework (unit tests), debugged using CLion & VSCode, Valgrind (memory leaks), (data Structures) AVL tree, vector, stack

Amazon Autonomous Bot, Self **Jul 2019**

- Programmed a web scraping bot that gathers product information on Amazon: price, URL, name
- Updated spreadsheet with data from initial scrape which sends an email notification to the user
- Utilized: Python, Google APIs, Google Sheets

Raspberry Pi Smart Monitor, Self **May 2019**

- Developed through Raspbian OS using open-source code via GitHub (MichMich)
- Implemented personal calendar, cryptocurrency stock tracker, weather API, date & time, etc
- Utilized: Linux, JSON, Python

Skills

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