Bryan Nguyen

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EDUCATION

University of Maryland, Baltimore County   **Baltimore, MD**
B.S. Computer Science   *Exp. May 2024*
Relevant Coursework: Data Structures, Computer Organization & Assembly Language Programming, Computer Architecture, Principles of Operating Systems, Design & Analysis of Algorithms, Software Engineering I

SKILLS

Coding Experience: x86 Assembly, C, C++, Python3, HTML, CSS, Javascript
Software & Tools: Ghidra, VirtualBox, PuTTY, WINSCP, Github, Git
Soft Skills: Flexibility, customer service, willingness to listen, multitasking

PROJECTS

Creation of a Multithreaded Buffer in a Debian Virtual Machine   **November 2021**
- Built auxiliary system calls in C that enable manipulation of a buffer holding 20 blocks of data, each containing 1024 bytes worth of characters.
- Wrote concurrent code by utilizing two pthreads, two semaphores, and a mutex resulting in increased throughput and synchronized processing.
- Shrinked kernel compilation time by 60% by enabling 8 CPU threads instead of 1.

Binary Search Tree of Discord Users   **March 2021**
- Developed a binary tree in C++ that stores 20 nodes representing Discord users from a sample database file.
- Implemented functionality of insertion, removal, query, and rebalance of nodes in a recursive manner.
- Maintained a balanced tree by ensuring a maximum height difference of one, between sub-trees in all parent nodes.
- Yielded logarithmic time for operations.

Hawaiian Pronunciation   **March 2020**
- Programmed a translator in Python that spells out a pronunciation of a Hawaiian phrase.
- Adopted a divide and conquer approach to slice the string into manageable components to translate.
- Concatenated the substrings into a newly translated phrase with increased readability.

WORK EXPERIENCE

Science Cosmos   **February 2020 - March 2020**
Tutor   *Ellicott City, MD*
- Mentored children on how to program and assemble LEGO MINDSTORMS EV3 robots.

Five Guys   **November 2022 - Present**
Crew Member   *Ellicott City, MD*
- Conversed with the boss and fellow crew members to make certain of our responsibilities and address concerns.
- Kept track of optimal times roles should take and met those deadlines.
- Managed a multitude of roles in order to complete my own tasks and help others.