Amado Otoro

https[://w](http://www.linkedin.com/in/amado-otoro-72350b1a7/)ww.[linkedin.com/in/amado-otoro-72350b1a7/](http://www.linkedin.com/in/amado-otoro-72350b1a7/)

(571)-426-8495 ● Annandale, VA ● [amadootoro@gmail.com](mailto:amadootoro@gmail.com)

# Education

**Virginia polytechnic institute and state university**

Bachelor of Science in Computer Science Expected May 2024

* Dean’s List Academic Achievement Award

# Technical skills

• Java • JavaScript

• Python • SQL

• C • HTML/CSS

# Experience

**Ethio-Makarios:**

*Front End developer*  June 2022 – August2022

* Constructed membership functionality for the Ethio-Makarios website, including database creation and design implementation in collaboration with team members.
  + Designed and developed a membership-only site, ensuring optimal user experience and security.
  + Worked alongside a fellow intern to develop and implement PHP-based backend functionality and security measures.
  + Developed a game exclusively for members using JavaScript, incorporating engaging features to enhance user experience.

**Research: Husky**

*HCI-Researcher* March 2023 – April 2023

* A team comprising of group members, staff, and myself collaborated to integrate communication between a ROS Husky and Tello Drone, enabling the arcade lab at Virginia Tech to leverage the drone's capabilities to conduct diagnostic checks on the Husky's health and performance.

# Projects

# External Sorting: Academic Project

# My project group successfully implemented an external sorting algorithm for binary data using a modified version of Heap Sort. Our project required efficient disk I/O on a random-access file with the use of a buffer pool. We generated a comprehensive report on the statistics of buffer pool performance during the sorting process and achieved an optimal runtime.

# PR Quadtree: Academic Project

# My project group developed a database system that utilizes a skip list and a specific PR Quadtree to store and query collections. Our system can perform spatial queries within a defined area. The spatial queries are executed through recursion, resulting in simplified code, and streamlined performance.

# Hash Project: Academic Project

# My project group developed a memory management project to efficiently manage data on songs with large memory space. We used a hash function and quadratic probing for collision resolution, ensuring rapid addition and removal of songs as the program utilized a single dedicated memory space.

# Personal Website: Personal Project

# I developed a concise website that succinctly presents my qualifications as a candidate. The website has undergone several iterations, with improvements made to its CSS and JavaScript components. As of April 2023, I am utilizing React to further enhance the website's reusability and to incorporate a more sophisticated user interface.

# Field of study

Data Structure, Computer Architecture and Operating System, Software Design, UX Design, Front End Design