# *Daniel Flanagan*

E. Lansing, MI | flanagandaniel05@gmail.com | (248) 909-8961 | LinkedIn | GitHub


## Education:

**Michigan State University** Graduation: December 2024
B.S. Computer Science, Minor Entrepreneurship GPA: 3.86

**Relevant Coursework:** Discrete Math, Calculus III, Physics II, Computer Organization and Architecture, Algorithms and Data Structures, Matrix Algebra, Ethics in Computer Science, Mobile App Development, Statistics, Computer Systems, Object-oriented Software Development

**Technical Skills:** Python (3yrs), C++ & C (2yrs), Java (1yr), Unix terminal, Creating and Selecting Algorithms and Data Structures, Boolean Operations, Familiarity with various IDE's (VSCode, PyCharm, CLion, VIM, Spyder), Git

## Prior Positions:

**AlixPartners, Southfield, MI** **July 2022 - Present**
**CRM Database Manager Intern**

- Gained experience with researching swiftly and finding accurate solutions
- Learned how to navigate and operate databases
- Gained experience working with a small team

**Boys and Girls Club, Royal Oak, MI** **January 2017 – December 2020**
**Volunteer Tutor**

- Volunteered as a tutor for less privileged young children
- Utilized and improved fundamental skills such as communication, patience, and persistence
- Collaborated with, learned from, and assisted others

## Projects:

Recipe App Project **(C++)** **April 2022**

- Focused on practicing Object-Oriented programming
- Created three different classes within separate header files. Objects from each class served separate purposes; Ingredient objects hold the ingredient name and portion size (represented as a fraction by a string) and the associated unit for the portion. Recipe class holds Ingredient objects, the number of servings, and a string vector representing recipe instructions. It adjusts the portion of ingredients to account for the amount needed per serving. RecipeApp class has both Ingredient and Recipe type vectors as its member variables. It can add ingredients to the pantry and adjust the stored Ingredient portions and Recipe servings when a recipe is used.
- Each class uses string streams via a friend function to determine how its object is output

Custom Hash Table **(Python)** **March 2023**

- Created my own hash table using Python to acquire experience working with the dictionary/map data structure and a greater understanding of its underlying methods and use cases
- Also implemented functions to simulate potential use cases, one of which uses the imagehash library to check for rotations of an image based on the sequential order of the image's hashes. The other can search a large text string for specified strings next to each other, similar to searching for words in a file, but it disregards the order of these strings in the text, only accounting for them being consecutive.

Clicker (HTML, JS, CSS) **April 2023**

- A website I created that implements a button and displays a count of the total number of times the button has been clicked.