

# Iain Tierney

[Personal Website](#) | [Github](#)

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## EDUCATION

### UNIVERSITY AT BUFFALO

BUFFALO, NY | MAY 2022

BACHELOR OF SCIENCE

Major: Computer Science

Cum. GPA: 3.85 / 4.0

Major GPA: 3.95 / 4.0

Honors: Deans List

### SOMERS HIGH SCHOOL

Somers, NY | Grad. June 2018

HS DIPLOMA

Honors: High Honor Roll

## RELEVANT COURSES

### UNDERGRADUATE

- Software Engineering
- Systems Programming
- Discrete Structures
- Data Structures
- Computer Organization
- Linear Algebra

## WORK EXPERIENCE

### TOWN OF SOMERS

DATA COORDINATOR INTERN

May 2019 – August 2019 | Somers, NY

- Stored physical files and digitized data as CSV files using python.
- Lexicographically organized data for easy updating and retrieval by authorized team members.
- Created a sorting algorithm to find site users based upon various data points.

### UNIVERSITY AT BUFFALO

UNDERGRADUATE TEACHING

ASSISTANT

Jan 2020 - Present | Buffalo, NY

- Host lab sections and office hours as well as proctor exams.
- Reviewing computer science concepts taught in the classroom.
- Leading small groups of students to the completion of various programming assignments.

## PROJECTS

### SORTING VISUALIZER | [VIEW PROJECT](#)

September 2020

- A web app built with jQuery, CSS3, HTML5 to visualize various sorting algorithms.
- Implemented Quick sort, Bubble sort, Selection sort and Insertion sort.
- Enables the user to pause the visualization and adjust the speed of the visualization.

### AUDIO VISUALIZER | [VIEW PROJECT](#)

August 2020

- A web app that integrates the SoundCloud API to visualize audio tracks using their respective frequencies.
- Using JSON to talk to the SoundCloud API, a user can request a song and watch/listen in real time to the visualization.

### HEALTH FITNESS APP | [VIEW PROJECT](#)

September 2020 - Current

- Built with Flask and SQLite for the backend and looking to migrate to React JS framework for the frontend.
- A health tracker and fitness web app built with an agile development team consisting of four other members.
- All in one health tracker to keep track of users nutrition and health, allow users to share fitness tips and feats, calculate various body-health measurements, and more.

### DYNAMIC MEMORY ALLOCATOR

[VIEW ON GITHUB](#)

April 2020

- An implementation of malloc(), calloc(), realloc(), and free().
- Uses the method of multi-pool allocation to fetch and store memory blocks from the operating system.
- Capable of running many single-threaded linux applications.

## SKILLS

### TECHNICAL SKILLS

Proficient with:

Python • C • C++ • Agile(Scrum) • Scala  
Java • Assembly(MIPS) • React • HTML5  
CSS3 • JSON • Git • JavaScript  
MySQL • Flask • Bottle • Vue

### SOFT SKILLS

Problem Solver • Collaborator  
Organized • Leader