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

WORK EXPERIENCE

UNIVERSITY AT BUFFALO
Teaching Assistant
Jan 2020 - Present | New York, 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.

TOWN OF SOMERS
Office Clerk
May 2019 – August 2019 | Somers, NY

- Sorted and stored data for the Town of Somers Parks and Recreation office.
- Kept physical files and digitized records organized for easy updating and retrieval by authorized team members.
- Provided clerical support to company employees by copying, faxing and filing documents.

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.

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.

PATHFINDING VISUALIZER | View on Github
Fall 2019

- Built with JS, Scala, Akka actor system and SocketIO for the server.
- Finds the shortest path for a character to a user selected location while avoiding impassable ”water” tiles.
- Implemented with Breadth-first search.

SKILLS

TECHNICAL SKILLS

Proficient with:
Python • C • Assembly(MIPS) • Scala
Java • Javascript • HTML5 • CSS3
JSON • Git • Agile(Scrum)

Familiar with:
MySQL • Flask • Bottle

SOFT SKILLS

Problem Solver • Collaborator
Organized • Leader