Anthony L. Tung

altung@umich.edu – 248.756.2231
22680 Novi MI, 48374

EDUCATION

University of Michigan   *Ann Arbor, MI*
B.S.E. in Computer Science   *Graduation: 04/2018*
GPA: 3.3/4.0
Relevant Coursework:

- Data Structures and Algorithms
- Programming and Introductory Data Structures
- Discrete Math
- Elementary Programming Concepts
- Introduction to Computer Organization
- Foundations of Computer Science
- Web Databases and Information Systems

PROJECTS

Photo Album *Python, MySQL, JavaScript*
- Created a working photo album with the Model-view-controller architecture.
- Implemented sessions and also dynamically rendered web pages.

Travelling Salesman (TSP) *C++*
- Coded Prim's Algorithm to solve for a Minimum Spanning Tree.
- Implented 2-opt to find a fast but close estimate to the TSP.
- Used Prim's Algorithm as the lower bound and the estimate as the original upper bound to find the optimal TSP weight using the branch and bound algorithm.

Log File Manager *C++*
- Implemented a program to efficiently analyze a large log file where each log had a timestamp, a category, and a message.
- Applied concepts such as using optimal data structures, hash tables, runtime and storage tradeoffs, and accessing multiple data structures to perform operations.

Priority Queue Survival Game *C++*
- Implemented a survival game with zombies attacking for a set amount of rounds and a set amount of ammo for each round.
- Created priority queue data structures to determine which zombies to shoot first based on their current distance, health, and stats.

Map Search Program *C++*
- Implemented a program to use a Breadth and Depth First Search to find a path to a certain character in input text documents.
- Applied concepts involving different data structures and how to efficiently use different containers.

EXPERIENCE

University of Michigan Randall Lab   *Ann Arbor, MI*
Physics Laboratory Assistant   *10/2014-04/2015*
- Assisted PhD Physics professors with their personal projects.
- Improved Introductory Labs by experimenting with new and different equipment.
- Applied professional etiquette and excellent time management to complete tasks.

LEADERSHIP

AIV Finance Team
- Manage organization finances for scholarships and fundraising.
- Host outreach events for students on campus.

Theta Tau
- Brother of largest and oldest Professional Engineering Fraternity.

SKILLS

Computer
- Proficient: C++
- Past Experience: MySQL, Flask, Python, HTML, CSS

Languages
- Mandarin Chinese, Korean