Matthew Barber



quitesimplymatt@gmail.com matthewbarber.io

Profile

I am a Computer Science student proficient in numerous programming languages and tools. Beyond writing functioning code, I take pride in the maintainability and modularity of my work. I can work efficiently alone, being a disciplined and resourceful individual, always eager to improve my craft. With my employment and volunteering experiences necessitating cohesive teamwork, I enjoy working with and learning from my peers, and can communicate my own ideas succinctly.

All of my projects can be found at github.com/Honno. Examples of my work include 1

quine.qz

Gzip file that extracts to an exact copy of itself, ad infinitum. Self-referential CRC was bruteforced by a multiprocessing Python script.

MTR Network Info Centre

Java program for finding out information about Hong Kong's trains. Required implementing a graph data structure and the BFS algorithm.

University events platform

NodeJS site for students to manage events. Uses Express for routing, Pug for templating, and MongoDB & Mongoose for data storage.

Space Hermit

POV animation of a cockpit in space, made with Java & LWJGL. Includes custom bobbing and shake-cam SFX code.

Twitter Anew

Python CLI tool to manage accounts following too many users. Utilises the Twitter API and the platform's Lists feature.

Expert system

Common Lisp implementation of forward chaining for an inference engine.

Employment

Starbucks

September 2018—February 2019

Café chain

Preparing various beverages on request with speed, quality and consistency. Working cohesively with team members to make all aspects of the operation run smoothly. Taking customers orders, responding to enquiries and remedying any issues. Responsible for quality control and the cleanliness of the store.

Adventure Island

July-September 2017 & 2018

Amusement park

Serving customers tickets and wristbands to gain access to the rides and facilities of the park. Explaining the park's various offerings and responding to any enquiries.

Regularly communicating with team members and leaders to meet the changing needs of the day. Mitigating conflict when service was refused due to unreasonable requests or facility misconduct.

Volunteering

Southend Churches Winter Night Shelters

November—April since 2015

Overnight homeless shelter network for the winter months

Evening and morning shift volunteer assisting guests and other volunteers with various tasks. Preparing venue before guests arrived and tidying up the venue after they left. On-call for local shelter when they did not have enough overnight volunteers.

Off The Streets

September 2018-February 2019

Overnight homeless shelter operating year-round

Full shift (evening to morning) volunteer, responsible for maintaining peace in the shelter. Connecting with guests to assist integrative steps such as finding work and housing. Dealing appropriately with problematic behaviour from guests.

Education

Aston University September 2016-

Studying BSc Computer Science; graduation July 2020.

Southend High School for Boys

September 2009—June 2016

2016 A-Levels

2014 GCSEs

Computing (B), Mathematics (B), Physics (C). 11 A*-C grades inc. English, Maths and Science.