Alexander Chai

http://www.contrib.andrew.cmu.edu/~achai/
(808)-799-9790 achai@andrew.cmu.edu
5000 Forbes Ave. SMC 1235, Pittsburgh, PA, 15289

Education

Carnegie Mellon University

5000 Forbes Ave. Pittsburgh, PA 15213 | Aug 2014 - Present

Major in Mathematical Sciences, Minor in Computer Science, and an anticipated second major in Computer Science with 05/2018 graduation

Cumulative GPA - 3.73/4.0

Dean's List, High Honors, Fall 2014, Fall 2015

Extracurriculars Include: Origami Club, ACM, CMU Computer Club

Relevant Classes Taken or in Progress Include:

21-241 - Matrices and Linear Transformations

15-251 - Great Theoretical Ideas in Computer Science

15-213 - Introduction to Computer Systems

15-210 - Parallel & Sequential Data Structures & Algorithms

21-373 - Algebraic Structures

Experience

Punahou School - iOS Mobile App Developer

1601 Punahou St. Honolulu, HI | June 2013 - Present

Was a volunteer iOS app developer in high school in charge of directing various student projects

Main developer for the *Bartle Test* project

One of two main developers for *iCarnival* project.

Hawaii Information Service - Internship

650 Iwilei Rd, Suite 670, Honolulu, HI 96817 | June - Aug 2014

Was instrumental member of planning process as well as initial development and programming for the *Caravan* app project, an iOS app designed to assist in real estate survey data management that read and wrote client data to a server using the JSON interchange format.

Skills and Abilities

Programming Languages

C, Objective-C, SML, Java, HTML/CSS

Languages Spoken

Fluent in English, Basic working proficiency in Japanese

Hacks and Projects

Asteroids in Space! - TartanHacks Entry

February 2015

An interactive game which uses a Myo, a projector, and OpenCV to allow the player to play the game *Asteroids* using the floor as a screen and controlling gameplay with body movement. Was placed in the top 6 best submissions of TartanHacks 2015.

Bartle Test for iOS

Ongoing

A personality test for iOS for use in classrooms based on a test created by Erwin Andreasen and Brandon Downey. Currently being updated for version 2.0. v.1.0 Released in Summer of 2014, v.2.0 set to be finished and released soon

https://itunes.apple.com/us/app/bartle-test/id887069888?mt=8

iCarnival v.3.0 for iOS

February 2014

An iOS app for high school's annual Carnival. Provided information about Carnival such as hours and location, as well as a social media feed, maps, and a live update system built using the Parse API.

https://itunes.apple.com/us/app/icarnival-punahou-carnival/id493164869?mt=8

iGo Assistant for iOS

May 2014

An iOS app built with a partner to assist in the playing of the board game Go. Includes guides to which piece configurations or "shapes" would favor which players, and guides to a variety of sets of starting moves, known as *Joseki*

MallocLab - 15-213 Project

November 2015

An implementation of dynamic memory allocation in C optimized for heaps of size 4GB or lower. When run through a series of test scripts it achieved a utilization of 88% and a throughput 15% greater than that of the GNU C standard library malloc implementation.

More Projects at: http://www.contrib.andrew.cmu.edu/~achai/projects.html