Alexander Chai

Website: www.andrew.cmu.edu/user/achai/
Phone: (808)-799-9790
Email: achai@andrew.cmu.edu
5000 Forbes Ave. SMC 1235, Pittsburgh, PA, 15289

Education

Carnegie Mellon University

B.Sc. in Computer Science

B.Sc. in Discrete Mathematics

both with completion in May 2018

GPA - 3.78/4.0

Dean's List F14, F15, S16, F16, S17

Extracurriculars Include: Origami Club, Association of Computing Machinery, CMU Computer Club, CMU Math Club, CMU Putnam Team

Relevant Coursework (as of May 2017):

   15-440 - Distributed Systems

   16-385 - Computer Vision

   15-451 - Algorithm Design and Analysis

   15-251 - Theoretical Ideas in Computer Science

   21-301 - Combinatorics

   15-354 - Computational Discrete Math (Fall '17)

   21-341 - Linear Algebra (Fall '17)

Experience

Carnegie Mellon - Research Assistant

Carnegie Mellon University | June 2016 - Present

Helped design and build the *pdfnotebook* note-taking program using the PDF.js API with Prof. Seth Goldstein

Implemented front end functionality from scratch including onscreen notes and highlight-annotations.

Hawaii Information Service - iOS Intern

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

Helped plan as well as develop the *Caravan* app project, an iOS app designed to assist in real estate survey data management.

Punahou School - iOS Developer

1601 Punahou St. Honolulu, HI | June 2013 - March 2015

Served as a volunteer iOS app developer in high school in charge of directing student projects

Head developer for the *Bartle Test* project and one of two developers on the *iCarnival* project (see *Projects*)

Skills

Programming Languages & Technologies

C, Objective-C, SML, Java, HTML/CSS, JavaScript, iOS, Cocoa, Swift, Git, LaTeX, Matlab, Maple, PDF.js, COBOL

Projects

iCarnival for iOS - For Punahou School
Feb. 2014

Built an iOS app for high school's annual Carnival.

App provides information about Carnival such as hours and location, a map system, among others.

Received 700+ downloads from the iOS app store

Asteroids in Space! - TartanHacks Entry
Feb. 2015

Worked with team that created a virtual reality version of the game *Asteroids*.

Placed in the top 6 submissions of TartanHacks 2015.

Pic8 - TartanHacks Entry
Feb. 2016

Collaborated on a reminders app for the iPhone that keeps track of reminders using pictures.

Implemented the reminders view as well as all the systems for managing app data

Bartle Test - For Punahou & Doug Kiang
Mar. 2015

Developed a iOS personality test for use in classrooms based on one made by Erwin Andreasen and Brandon Downey.

Also implemented updates such as new touch recognition features and support for new hardware

MallocLab - Intro to Computer Systems Lab
Nov. 2015

Implemented dynamic memory allocation in C optimized for heaps of size 4GB or lower.

Achieved a utilization of 88% and a throughput 15% greater than that of the GNU C library implementation.

More projects at www.andrew.cmu.edu/user/achai/projects.html