

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 Mathematics
both with completion in May 2018

GPA - 3.71/4.0

MCS Dean's List S16, w/ High Honors, F14, S15,
Extracurriculars Include: Origami Club, Association of
Computing Machinery, CMU Computer Club, CMU
Math Club, CMU Putnam Team

Relevant Coursework (as of September 2016):

- 15-213 - Introduction to Computer Systems
- 15-451 - Algorithm Design and Analysis (In Progress)
- 15-251 - Theoretical Ideas in Computer Science
- 21-301 - Combinatorics
- 21-373 - Algebraic Structures
- 21-300 - Basic Logic (In Progress)
- 21-241 - Matrix Algebra

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,

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, and other features.

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
makes 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