

# Alexander Chai

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



## Education

### Carnegie Mellon University

Pittsburgh, PA | Graduating May 2018

Bachelor of Sciences in Computer Science

Cumulative GPA - 3.71/4.0

Dean's List, S16, with High Honors, F14, F15

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

#### Relevant Coursework (as of May 2016):

- 15-213 - Introduction to Computer Systems
- 15-210 - Parallel & Sequential Data Structures & Algorithms
- 15-251 - Great Theoretical Ideas in Computer Science
- 21-373 - Algebraic Structures
- 21-301 - Combinatorics



## Experience

### Punahou School - iOS Mobile App Developer

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

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

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

### Hawaii Information Service - Internship

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

Played an integral role in the planning process as well as the development and programming for the *Caravan* app,

*Caravan* 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

### Programming Languages & Technologies

C, Objective-C, SML, Java, HTML/CSS, iOS, Cocoa, Swift

### Spoken Languages

Fluent in English, Basic working proficiency in Japanese



## Hacks and Projects

More projects, as well as GitHub and App Store Links (where applicable) can be viewed at [www.andrew.cmu.edu/user/achai/projects.html](http://www.andrew.cmu.edu/user/achai/projects.html)

### Bartle Test for iOS - For Punahou School and Douglas Kiang

Ongoing

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

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

### iCarnival for iOS - For Punahou School

February 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 other features.

Received in excess of 700 downloads from the iOS app store

### Asteroids in Space! - TartanHacks Entry

February 2015

Worked with team that created an interactive game which allows the player to play the game *Asteroids* projected onto the floor with body movement.

Placed in the top 6 best submissions of TartanHacks 2015.

### Pic8 - TartanHacks Entry

February 2016

Built a visual reminders app for iPhone that would associate every reminder with an image taken by the phone's camera

Allowed users to more easily record event details on posters, schedules etc, by allowing them to take a picture of the document rather than enter details in by hand.

### MallocLab - Introduction to Computer Systems Project

November 2015

Implemented 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.