Carnegie Mellon University SMC 5655
Pittsburgh, PA 15289

№ 301-244-9523

⋈ mjmckay@andrew.cmu.edu

matthewjmckay.com

Matthew McKay

Education

2010-present

Bachelor of Science in Computer Science (Minor in Mathematics), Carnegie Mellon University (Class of 2014), Pittsburgh, PA, GPA: 3.97/4.0 (Dean's List).

2006-2010

High School Diploma, *Poolesville High School*, Poolesville, MD, *GPA: 3.88/4.0, Weighted GPA: 4.75/5.0.*

Experience

Summer 2013

Software Engineering Intern, Shopkick, Redwood City, CA.

- o Implemented mcommerce features to allow purchases in both the Android and iOS apps
- Implemented server support for mcommerce, including pulling down transaction information and processing it

Fall 2012— Spring 2013 Research/Independent Study, Carnegie Mellon University, Pittsburgh, PA.

- o Implemented a static verification checker for the language C0 using the Z3 theorem prover
- o Checks for array index out-of-bounds accesses, null-pointer dereference, arithmetic errors (like division by zero) by making use of knowledge from loop invariants and contracts

Summer 2012

Software Engineering Intern, *Google*, Mountain View, CA.

- Worked on the YouTube Video Management Team
- Implemented advanced search features in the Video Manager, and worked on improvements to the new Dashboard

Fall 2011-Spring 2012 **Teaching Assistant for Principles of Functional Programming**, *Carnegie Mellon University*, Pittsburgh, PA.

- o Helped teach and guide students through learning functional programming with SML
- o Taught recitations, wrote homeworks, held office hours, graded papers

Skills

Languages

SML, C, Python, Java, Javascript

Software Vim, Git, Linux

Activities

Greylock Hackfest 2012 Worked in a group to develop τ (which made it into the top ten projects), a webapp for students to submit code and view and respond to comments from teachers for instant feedback

Game Creation Society

Programmer of games, participated in project **Lucid** in Fall 2010 and project **101 Ways to Die** in Spring 2011