email: jacquelinekay1@gmail.com

EDUCATION

Swarthmore College

GPA: 3.54 (Computer Science: 3.67)

Expected Graduation: May 2014

Computer Science Major, Double Minor in Engineering and Mathematics

Relevant Coursework: Fundamentals of Digital Systems, Data Structures and Algorithms, Mobile Robotics, Computer Vision, Theory of Computation, Natural Language Processing, Computer Architecture, Humanoid Robotics, Computer Networks, Artificial Intelligence

Languages: Proficient in Java, C/C++, Python and Matlab; familiar with Javascript, Common Lisp, and Perl.

Projects

Camtango

Singlehandedly released Camtango for Android, an event-based photosharing application. Handled asynchronous threading, image processing, user interface, server calls, and SQLite databases.

OpenSwype

Utilized computational geometry and natural language processing techniques to implement a continuous stroke input ("Swype") keyboard for Android phones.

Work Experience

Carnegie Mellon Robotics Institute – Summer Scholar

Summer 2013

Led a project on time-dependent, resource-constrained path planning for an autonomous planetary rover. Designed a C++ simulation modeling rover energy expenditure and thermal levels. Project expected to culminate in a research paper.

Swarthmore College Engineering Department – Robotics TA

Fall 2012

Instructed students in ROS, basic Linux usage, and robotics theory. Administered Git repositories for homework backup and submission.

Lead Android Developer - AgileZoom, LLC

Summer 2012

Responsible for development and publication of all Android products for AgileZoom, Camtango and ici.

Honors and Awards

RISS REU 2013

Competitive NSF research grant for undergraduates from the Carnegie Mellon Robotics Institute.

William Plumer Potter Fiction Award

2013

Swarthmore Department of English Literature's prize for best student short story.

Hurd Summer Research Fellowship

2011

Competitive fellowship for undergraduate research in the sciences and engineering.