

Michael Rooke, M.Sc.

Mike "dot" Rooke "at symbol" gmail "dot" com

Education

M.Sc. Computing and Information Sciences,

Queen's University, Kingston, ON, 2009

B.Sc. Mathematics and Engineering (Computing and Communications Option),

Queen's University, Kingston, ON, 2006

Skills

- Very experienced with C, C++, Java.
- Extensive experience with Eclipse and Visual Studio
- Experience with C#, Python, Objective C, Microchip PIC assembly, Motorola HC11 assembly, SQL, bash, VB, Matlab, Maple, LabView

Experience

Research Intern - Autodesk Canada Inc., Toronto Ontario, February-October 2009

- Developed "[AppMap](#)," a new method of visualizing and accessing vast GUI interfaces, including Maya and AutoCAD. AppMap was developed with OpenGL and WinForms, with a version developed specifically for the Microsoft Surface.
- Conducted user studies on AppMap, and submitted results to CHI 2010 (acceptance pending)

Research Assistant - Human Media Lab, Queen's University, Kingston Ontario, 2006-2008

Developed two applications involving infra-red tracking of small reflectors:

- Experimentation with a way for people to interact with hexagonal computers and computerized objects. It is demonstrated by the following video: <http://www.youtube.com/watch?v=tj3kXzLjVPQ>
- Fingertip control of objects on a screen using small reflectors on the fingers to investigate touch-less, action-at-a-distance gestures and interactions for the fingers and hands, with possible application to very large-scale displays.

Teaching Assistant - Queen's School of Computing; Kingston, Ontario

- TAed four courses from September 2006 through May 2008 where responsibilities included preparing tutorials, labs and some other things in the following courses:
- Systems-Level Programming, Computer Science for Engineers, Human-Computer Interaction, Software Specifications

Strategy Manager - Queen's University Solar Vehicle Team; Kingston Ontario; 2004-2006

- Led the strategy division of the Queen's University Solar Vehicle Team for two years to prepare for and participation in the North American Solar Challenge 2005, racing from Austin, Texas to Calgary, Alberta in July 2005.
- Managed team of three in the development of new simulation software written in Java (now archived in sourceforge.net as qSolarSim.)

Lab Assistant - Solar Calorimetry Lab, Queen's University, Kingston Ontario, May-August 2004

- Organized multiple HP3497 data acquisition computers for use in a heat transfer experiment for Dr. Steve Harrison.
- Designed a program in LabView for control and observation of the experiment.
- Designed and built, in two weeks, a small pulse-counting circuit using a PIC microcontroller for use in the experiment.

Activities

- Currently volunteering with the Canadian Cancer Society's 2009 *Relay for Life* as Entertainment Chair
- Enjoy many physical activities including Running, Rock Climbing, Skiing, Squash, Gymnastics, Weight Lifting, Canoeing, Kayaking, Ice Hockey, Soccer and Muay Thai.