

PHILIP MARK

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EDUCATION

M.A.Sc Electrical & Computer Engineering — Adviser: Dr. Lutz Lampe *2012 – (2014)*
University of British Columbia, Vancouver, BC

B.Eng. Computer Engineering *2007 – 2011*
McGill University, Montreal, QC

CAREER HISTORY

Software Developer Intern, Ericsson *Jan – Aug 2012*

- ◊ Developed software for a SIP gateway service in Java
- ◊ Implemented a Javascript library and HTML5 app for WebRTC (video conferencing)

NSERC/USRA Researcher, McGill University *Summer 2011*

- ◊ Assisted in the investigation and implementation of a novel algorithm for anomaly detection in computer networks using Matlab
- ◊ See Publications section

Cellular Stack Software Developer Intern, Blackberry (RIM) *Winter 2011*

- ◊ Developed new features in embedded C for the L1 control layer of the LTE/4G protocol stack (RIM Cellular Technologies group)

Grader, McGill University *Fall 2010*

- ◊ Assisted professor in grading undergraduate students' assignments and examination materials for the course *Introduction to Computer Engineering*

Driver Software Developer Intern, Blackberry (RIM) *Summer 2010*

- ◊ Developed USB driver code in C and desktop tools in C++ for the USB team (Operating Systems group)

SKILLS

Programming: C, C++, Java, Matlab, Javascript/jQuery, HTML5/CSS, Python, VHDL (Altera Quartus & Modelsim), ARM Assembly, MIPS Assembly, L^AT_EX

Selected Technologies: Perforce, Git, Wireshark, JMeter, cURL, PSPICE, LogicWorks, Visual Studios, Eclipse, Notepad++, NetBeans, MODx, Wordpress

PUBLICATIONS

Z. Yao, **P. Mark**, M. Rabbat, “[Anomaly Detection using Proximity Graph and PageRank Algorithm](#)”, *IEEE Transactions on Information Forensics and Security*, vol. 7, no 4, pp. 1288-1300, August 2012.

AWARDS AND HONORS

NSERC CGS M Postgraduate Scholarship (\$17,500), University of British Columbia, Department of Electrical and Computer Engineering *2013 – 2014*

Research Assistantship (\$8,000), University of British Columbia, Department of Electrical and Computer Engineering *2013 – 2014*

Graduate Support Initiative Award (\$5,000), University of British Columbia, Faculty of Graduate Studies *2012*

Research Assistantship (\$16,500), University of British Columbia, Department of Electrical and Computer Engineering (Dr. Lutz Lampe) *2012 – 2013*

NSERC Undergraduate Summer Research Award (\$5,625), McGill University, Department of Electrical and Computer Engineering (Dr. Michael Rabbat) *Summer 2011*

VOLUNTEERING AND EXTRA-CURRICULAR ACTIVITIES

UBC Mafia Club, Club executive – Event Organizer *2013 – 2014*

2013 IEEE SmartGridComm, Student volunteer *Oct 22, 2013*

UBC Graduate Student Society, Graduate student orientation volunteering *Aug 29 – 30, 2013*

Vancouver Ultimate League, Volunteering (merchandise sale, CUC 2013 scorekeeping) *June 8, Aug 14 2013*

Vancouver Ultimate League, Captain of *Floppy Discs* summer team *Summer 2013*

Technophilic Magazine, Web developer and contributor for an undergraduate student technology magazine at McGill University (<http://www.technophilicmagazine.com>) *2009 – 2011*

End Poverty Now, Web developer for a non-profit organization aimed at fighting poverty through community-led initiatives (<http://www.endpovertynow.ca>) *2009 – 2010*

HOBBIES AND INTERESTS

Personal: hockey, backcountry splitboarding, Ultimate, tennis, web design
Research: telecommunications, protocol design