

PHILIP MARK

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<http://www.philipmark.net>

EDUCATION

- M.A.Sc Electrical & Computer Engineering** *2012 – 2014*
University of British Columbia, Vancouver, BC
Thesis: “[Ethernet over Light](#)” (Supervisor: Dr. Lutz Lampe)
- B.Eng. Computer Engineering** *2007 – 2011*
McGill University, Montreal, QC

EXPERIENCE

- Software Developer Intern, Ericsson, Montreal, QC** *Jan – Aug 2012*
◊ Developed functionality for a SIP gateway service in Java
◊ Implemented a Javascript library and HTML5 app for WebRTC (video conferencing)
- NSERC USRA Researcher, McGill University, Montreal, QC** *Summer 2011*
◊ Assisted in the investigation and implementation of a novel algorithm for anomaly detection in computer networks using Matlab (see [Publications](#))
- Cellular Stack Software Developer Intern, Blackberry Limited, Waterloo, ON** *Winter 2011*
◊ Developed new features in embedded C for the L1 control layer of the LTE/4G protocol stack (Cellular Technologies group)
- Driver Software Developer Intern, Blackberry Limited, Waterloo, ON** *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, ARM Assembly, MIPS Assembly, \LaTeX

Selected Technologies: Git, Perforce, Visual Studios, Eclipse, Notepad++, NetBeans, Wireshark, JMeter, cURL, PSPICE, LogicWorks, Altera Quartus & Modelsim, 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)**, Natural Sciences and Engineering Research Council of Canada (held at University of British Columbia) *2013 – 2014*
- Research Assistantship (\$8,000)**, University of British Columbia, Department of Electrical and Computer Engineering (Dr. Lutz Lampe) *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)**, Natural Sciences and Engineering Research Council of Canada (held at McGill University) *Summer 2011*

VOLUNTEERING AND EXTRA-CURRICULAR ACTIVITIES

Flowerbowl 2014 , Event volunteer	<i>June 7, 2014</i>
Vancouver Ultimate League , Captain of <i>Floppy Discs</i> ultimate team	<i>Summer 2013, 2014</i>
UBC Mafia Club , Club executive (special events organizer)	<i>2013 – 2014</i>
IEEE SmartGridComm 2013 , Event volunteer	<i>Oct 22, 2013</i>
UBC Graduate Student Society , New graduate student orientation events volunteer	<i>Aug 29 – 30, 2013</i>
Canadian Ultimate Championship 2013 , Scorekeeping volunteer	<i>Aug 14, 2013</i>
Vancouver Ultimate League , Merchandise sale volunteer	<i>June 8, 2013</i>
Technophilic Magazine , Web developer and contributor for an undergraduate student technology magazine at McGill University (http://www.technophilicmag.com)	<i>2009 – 2011</i>
End Poverty Now , Web developer for a non-profit organization aimed at fighting poverty through community-led initiatives (http://www.endpovertynow.ca)	<i>2009 – 2010</i>

HOBBIES AND INTERESTS

Personal: ultimate, hockey, backcountry splitboarding, tennis
Research: telecommunications, protocol design