

PHILIP MARK

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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

May – Aug 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

Jan – Apr 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

May – Aug 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, Python, VHDL, ARM Assembly, MIPS Assembly, \LaTeX

Web: HTML5, Javascript/jQuery, CSS/SASS, WebRTC, MODx, Wordpress

Source control: Git, Perforce

IDEs: Eclipse, Visual Studios, Sublime Text, Notepad++, NetBeans

Design: Adobe Photoshop, Adobe Illustrator

Selected Technologies: Wireshark, JMeter, cURL, PSPICE, LogicWorks, Altera Quartus & Modelsim, DevTrack, DevTest

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) *2011*

VOLUNTEERING AND EXTRA-CURRICULAR ACTIVITIES

Flowerbowl 2014, Event volunteer *June 7, 2014*

Vancouver Ultimate League, Captain of *Floppy Discs* ultimate team *Summer 2013, 2014*

UBC Mafia Club, Club executive (special events organizer) *2013 – 2014*

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

UBC Graduate Student Society, New graduate student orientation events volunteer *Aug 29 – 30, 2013*

Canadian Ultimate Championship 2013, Scorekeeping volunteer *Aug 14, 2013*

Vancouver Ultimate League, Merchandise sale volunteer *June 8, 2013*

Technophilic Magazine, Web developer and contributor for an undergraduate student technology magazine at McGill University (<http://www.technophilicmag.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: ultimate, hockey, tennis, backcountry snowboarding (AST-1 certified)

Research: telecommunications, protocol design