PHILIP MARK

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EDUCATION

M.A.Sc. Electrical & Computer Engineering University of British Columbia, Vancouver, BC Thesis: "Ethernet over Light" (Supervisor: Dr. Lutz Lampe) B.Eng. Computer Engineering 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, Javascript/jQuery, HTML5, CSS (SASS), Python, VHDL, ARM Assembly, MIPS Assembly, LATEX

Selected Technologies: Git, Perforce, Visual Studios, Eclipse, Sublime Text, 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) 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