RAJSIMMAN RAVICHANDIRAN

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PROFILE STATEMENT

Dedicated new graduate with a strong passion for software development along with proven industry experience; proficient interpersonal skills for client relationships and ability to work well in teams and individually

EDUCATION

Bachelor of Applied Science, University of Toronto (U of T) 2009-2014
Major in Electrical Engineering with 1 year Professional Year Experience (PEY)

- Final year GPA: 3.51, Dean's List

TECHNICAL SKILLS

- **Programming**: Java, Python, C/C++, Shell Scripting, SQL, HTML, CSS, PHP, JavaScript
- **Operating Systems**: Linux (Ubuntu, RedHat) and Windows
- **Applications**: AWS EC2, Git, TortoiseSVN, MySQL, LDAP, Selenium, Redmine
- **Design Tools**: Eclipse, Matlab/Simulink, Wireshark, AutoCAD, Quartus II, PSPICE
- **Laboratory Equipment:** Cisco IOS, Spectrum Analyzer, Oscilloscope, Arbitrary Signal Generator

RELEVANT ENGINEERING EXPERIENCE

Volunteer Research Assistant, Smart Applications on Virtual Infrastructure (SAVI) Network**,** U of T May 2014-Present

- Actively worked on a national distributed application testbed, which adopts the Infrastructure as a Service (IaaS) cloud-service model, to provide a platform for creating and delivering Future Internet applications and architectures
- Focused on extending the capabilities of the monitoring and measurement services of open-source cloud computing platform, OpenStack (Ceilometer) deployed on SAVI Testbed
- Assisted in building and installing servers; installing software for cloud management on SAVI Testbed

Software Developer Intern, Canada Health Infoway**,** Toronto (1 year PEY) 2012-2013

- Designed and developed front end using Bootstrap framework along with HTML, CSS and JavaScript
- Developed backend using PHP and wrote procedures in MySQL database and LDAP directories to process and store data
- Managed source code with other developers in the team using TortoiseSVN revision control
- Performed regression, sanity and cross-browser testing to resolve bugs on web browsers
- Tracked errors/bugs using Redmine project management web application and also submitted bug reports to inform other software developers about flaws
- Provided technical support to clients and co-workers having issues with the system

COURSES AND PROJECTS

Team member, Digital Acquisition System for Intravascular Ultrasound (IVUS) and Photoacoustic (IVPA) Imaging, U of T 2013-2014

- In a team of 3, developed a digital acquisition system for medical IVUS/IVPA applications for Sunnybrook Hospital
- Constructed image processing routines (in Matlab and Python) to remove noise components and enhance the image signal
- Implemented the serial link communication between the Field Programmable Gate Array (FPGA) and the PC (on software side) using Python
- Devised a custom Graphical User Interface (GUI) in Python using the PyQt4 toolkit

Internetworking, Electrical Engineering, U of T 2013

- Familiarized with TCP/IP Protocol Architecture, packet switching networks and data link layer protocols (Ethernet and Point-to-Point)
- Acquainted with gateway protocols including EGP (such as BGP) and IGP (such as RIP, and OSPF)
- Used Cisco IOS, routers, ethernet hubs, switches to setup networks and used Wireshark to capture packets to validate and verify packet information on those networks
- Analyzed and resolved network connection errors using Wireshark and network tools such as traceroute and ping

Project Lead, Server Project, U of T 2011

- Led a team of 3 to implement a secure storage server (using C programming language) that allows clients to store information in server
- Created test cases in order to detect software failures and wrote bug reports to help identify those flaws in the server
- Successfully operated with minimum 10 clients accessing the server simultaneously without any unintended crash, received A+ for the project

EMPLOYMENT EXPERIENCE

Counsellor, Da Vinci Engineering Enrichment Program (DEEP), U of T Summer 2011

- Facilitated student registration for each week during the summer academy
- Chaperoned DEEP trips or excursions
- Clarified concepts to students in courses such as Introduction to Micro-controllers and Introduction to Electrical Engineering
- Guided students during laboratory experiments to help them develop intuition and debugging skills

INTERESTS:

Playing chess and organized team sports including Soccer, Basketball and Badminton; learning and building simple Raspberry Pi projects; film (including documentaries)

References Available Upon Request