Spandan Bemby

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EDUCATION

Master of Applied Science and Engineering   **2014 - 2016**
University of Toronto, Communications Group
- Candidate under Professor Alberto Leon-Garcia's supervision

Bachelor of Applied Science and Engineering   **2009 – 2014**
University of Toronto, Electrical and Computer Engineering
- Graduated with Honors with CGPA 3.6 out of 4.0
- Relevant coursework: Operating Systems, Computer Networks, Algorithms, AI, Databases, Internetworking, Distributed Systems.

TECHNICAL SKILLS
- Programming: Python, C, C++, Java, Matlab, Octave
- Experience with Verilog and NIOS II
- Web applications: Ruby on Rails, Django, JavaScript
- Development Tools: Git, Eclipse, Vim

PROFESSIONAL EXPERIENCE

SAVI – *University of Toronto, MASc*   **Summer 2014**
- Updating existing Django Web Portal to work with deployment
- Presented an introduction to SAVI to 50 people during the annual workshop

SAVI – *University of Toronto, NSERC USRA*   **Summer 2013**
- Part of the Smart Applications on Virtual Infrastructure (SAVI) Testbed Team-working on expanding capabilities of Openstack cloud computing framework to support virtual Software Defined Infrastructure (SDI), under Professor Leon-Garcia.
- This required better management of an increasing number of computation resources.
- Researched and deployed systems to be used with existing infrastructure for automatic and centralized management.

BlackBerry – *Mobile Voice System, Software Developer*   **Winter 2013**
- Developed features and debugged issues for the Mobile Voice System, which provides access to desk phone features on smart phones.
- Migrated existing software from Java to C++, while improving system to be more robust and extensible.

IBM – *WebSphere, Business Process Management, Software Developer*   **Fall 2012**
- Developed tools that help organizations manage their business processes.
- Translated requirements into design and implemented and tested features for an editor, using JavaScript and the Dojo framework, which enables building and modifying business objects through a graphical interface.

Myplanet Digital – *Web Application Developer*   **Summer 2012**
- Designed and implemented features on web applications developed in Drupal CMS.

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- Extensive experience in front-end (HTML, CSS, JavaScript) and back-end (PHP) development.
- Developed and executed a test plan to ensure the deliverables worked correctly.

RELEVANT PROJECTS

Minrwave – *Co-founder and CTO*   **Summer 2013**
- Helped design features in a way that would conform to overarching goals of the system.
- Developed most of the system and made key decision on framework to use and the implementation of many features, such as user profiles, groups, etc.
- Implemented in Ruby on Rails framework.

Forex Analyzer – *Personal Project*   **Summer 2012**
- Designed a system that made recommendation on when to buy or sell currencies based on machine learning and technical analysis.
- System extracted live data from websites and used complex algorithms to process data.
- Developed system in Java and later reimplemented in Python.

Computer Organization - *University of Toronto*   **Winter 2012**
- Digital system design accounting for timing issues to create synchronous and asynchronous systems on FPGA Boards such as DE2 and DE0.
- Using Verilog, Assembly, and C implemented 1) microprocessor, 2) foosball game which controlled motors based on PS/2 IO interface, and 3) motion sensing calculator that interpreted movements of FPGA Board into an equation and computed the result.

Noobscoop – *Cofounder and Developer of Web Application*   **Summer 2011**
- Developed a Ruby on Rails web application- an online community intended to provide students with tools to make studying more effective.
- Implemented features such as discussion boards, and 'likes' and applets that help users visualize certain notions.

EXTRACURRICULAR ACTIVITIES

Take Action! Organization –*Co-President, formerly VP-Outreach,*   **Feb 2010-Present**
Volunteer
- Responsible for co-ordinating effort and ensuring the executives and the group are working towards fulfilling the goals of the organization.
- Organised and advertised events and recruited volunteers for events like CN Tower climb and sandwich runs.
- Volunteered at the Scott Mission – helped prepare and serve meals to the needy.
- Helped organize a Christmas Party for underprivileged children; designed and built a Plinko game for the children and provided food and decorations.