Jay Vyas

2B Computer Engineering

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SOFT SKILLS

- Excellent **work ethics**; willing to put in effort for success and motivated to learn new skills
- Outstanding **communication** and **teamwork** skills developed through previous work experience
- **Flexible** and adaptive to new situations and challenges; always working with a **positive attitude**
- Exceptional **time management** skills gained from working in a fast paced startup environment
- Superior **attention to detail** and **troubleshooting** experience obtained from various work experience

TECHNICAL SKILLS

Application Development:	C#, C++, C, Python, Java
Hardware Development:	Assembly, VHDL, BASIC programming, C
Web Development:	HTML, CSS
Scripting:	Python, Batch programming (DOS)
Integrated Development Environments:	Microsoft Visual Studio, Eclipse, Altera's Quartus II, PICAXE, Keil uVision, Multism 11.0
Database:	SQL (SQLite)
Familiar OS:	Windows, UNIX / Linux
Version Control:	SVN, Git
Lab Equipment/Hardware:	ARM microprocessors, PIC microcontroller, bread-board design, schematic analysis, PCB (design & soldering), FPGA, Oscilloscope, multi-meters, function generator

WORK EXPERIENCE

Software Developer — Ottawa, ON
AppZero — May 2014 - September 2014

- Improved automated scripts designed for AppZero's PACE migration tool using Python and Batch programming; implemented .csv and .txt file generation for big data/data mining
- Used Python as a rapid prototyping tool to test for and implement automation of application discovery
- Implemented bug fixes for front end and back end using C++, C# in MS Visual Studio
- Performed system, regression, functional, and performance testing on AppZero using both automated and manual testing methods in virtual machines using Virtual Box

IS Analyst/IS Operations - Datacenter — Mississauga, ON
Maple Leaf Foods — September 2013 - December 2013

- Monitored and provided support for SAP, BPCS, other legacy systems, and system back-ups of over 400 servers throughout Maple Leaf Foods at an international range
- Provided asset management services including inventory, rack and row mapping, and placement of 250 servers in data center along with managing power and cabling infrastructure for the equipment

- Performed daily sending/receiving of backup tapes, data integrity validation, and offsite data storage inventory, along with providing data recovery and restore services
- Handled all non-production transports to different environments (releasing and importing) with SAP
- Assisted in setting up and installing computer hardware (servers) into the Data Center using swing gear
- Created and maintained documentation for SOPs while training new full time employees

Computer Systems Assistant Waterloo, ON
University of Waterloo January 2013 - May 2013

- Successfully migrated 100+ machines from Windows XP to Windows 7
- Managed over 600 systems within University of Waterloo's Psychology department
- Assisted and troubleshot systems for students, post-graduate students, and faculty members
- Worked with networks (conflicting IP addresses) and re-wiring & organizing the wiring closets

Customer Service Specialist Brampton, ON
Wal-Mart Inc. May 2011 - September 2012

PC Technician - Co-op Student Mississauga, ON
Arco Computers Ltd June 2010 - August 2010

EDUCATION

University of Waterloo September 2012 - April 2017
Candidate for Bachelor of Applied Science in Computer Engineering (Honors BASc)

Relevant Courses: Embedded Microprocessor Systems, Operating Systems, Algorithms & Data Structures, Engineering Design and Embedded Systems, Digital Computers, Fundamentals of Programming, Linear Circuits, Electronic Circuits, Digital Circuits and Systems

PROJECTS

Reflex Meter March 2014

- Implemented a program to determine user's reaction time using the ARM microprocessor, programmed in Assembler with THUMB (subset of ARM) instruction set (RISC)
- Program utilized polling and interrupts to record time elapsed of user's reaction time to changing of LED's state and pressing a button; reaction time was displayed in 32 bits for 0.1ms x delay

Traffic Light Controller August 2013

- Simulated an intersection traffic light system with day/night mode using a finite state machine
- Flashed the LEDs at different frequencies using the built in clock; implemented using a modulus and binary clock divider and used buttons to detect humans/cars to change states
- Utilized an FPGA board and programmed the simulator with VHDL in Quartus II

Autonomous Line Following Robot April 2012

- Designed a robot using opto. sensors and PIC microcontroller using C and BASIC
- Programmed the robot to accurately follow and complete different routes autonomously
- Optimized robot design and placed 2nd in class competition, 7th place in Peel Region

ACTIVITIES & INTERESTS

- Passionate about robotics and hardware/software integration (activities include VEX and FIRST Robotics)
- Enjoy working out, playing sports like soccer and enthusiastic about competitive e-Sports and chess