Kureishi Shivanand

2 Staglin Ct. Markham, ON L6C 0K8 **|** [kureishishivanand1@gmail.com](mailto:kureishishivanand1@gmail.com) **|** (647) 262-5138

# Summary

Bachelor of Computer Engineering graduate who is hardworking, self-driven and detail-oriented. Excels in all aspects of the software development cycle for console and embedded systems, circuit analysis and design tools, digital systems, data analysis/machine learning and Android App Development.

# Technical Skills

**Tools:**

Linux/Windows, Matlab, Xilinx ISE, Adobe Creative Suite, NetBeans IDE, Multisim, Microsoft Office, Quartus, CodeWarrior IDE, Cadence Design Systems, Visual Studio, CodeBlocks IDE, Altium Designer, Eclipse, Android Studio, SQLite Studio/MySQL Workbench, uVision IDE, PyCharm IDE, Tableau Public, Selenium IDE/WebDriver/JMeter, Oscilloscope/Multi-meter, Waveform Generator

**Languages:**

Assembly, Java/Scala, HTML, CSS, VHDL/Verilog, Shell Programming/Scripts/TCL, VCS/Git JavaScript/jQuery/AJAX/Node.JS, React JS, C/C++, C#/.NET Framework, Perl, Python, PHP/ASP, SQL/MySQL, RTOS/Cortex Programming

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# Professional Experience and Projects

## Web Developer (Co-Op) | WebPromotions Internet Services INC. June 2013 – August 2013

**Key Achievements**

* Created 3 websites for clients using ASP and PHP in 2 months, which heightened customer satisfaction
* Assisted peers in completing their assigned webpages, resulting in increased company efficiency
* Developed company mobile website, allowing it to gain exposure across multiple devices
* Incorporated SEO tools to increase clients’ website searchability using relevant keywords
* Collaborated with peers to streamline the design process, allowing the company to increase productivity

**Engineering Capstone (Android App)**

* Engineered ad-hoc text messaging android app to facilitate multi-device communication
* Improved coding solutions to be most optimal per client’s requirements
* Tracked and reported progress via constant reports and meetings to supervisor
* Organized and led frequent team meetings to discuss direction of project and requirements to be fulfilled

**Anonymous Message Broadcaster**

* Established anonymous communication between multiple client and server using multi-threading principles
* Implemented socket programming using Java Networking and Encryption to simulate network sessions

**Routing Control System for Inter-domain Routing**

* Designed controller to compute shortest path to other networks via link costs
* Generated packet routes through various networks
* Integrated knowledge of BGP and inter-domain routing

**Ticketing System Software**

* Collaborated with team members to create interactive console for ticketing service
* Executed multiple black and white box testing through vigorous regression testing
* Integrated Test Driven Development using different levels of testing (unit cases, integration, system etc.)
* Incorporated Sprint planning within Agile environment
* Utilized SDLC layout and documented along each stage with improvements

**Network File Transfer Application**

* Created client that was able to upload and download file from server using Java Networking library
* Client request to change directories or list files in directory from server
* Utilized knowledge in TCP protocols and socket programming

**Embedded Systems Media Center**

* Produced an audio player, photo gallery and game on NXP LPC17xx board
* Enhanced knowledge in programming embedded systems and C using uVision IDE

**1-bit Full Adder (IC Design)**

* Designed full-adder circuit using logical effort method to receive a specific load capacitance
* Developed schematic of circuit and executed parametric and DC analysis to ensure correct functionality
* Created PCB layout of schematic using Virtuoso Layout Editor Turbo
* Generated testbench to compare schematic and extracted view from layouts

**Cache Controller**

* Programmed cache controller to interface SRAM units with other devices using Xilinx Spartan-3E FPGA
* Incorporated VHDL coding techniques in Xilinx ISE CAD to implement controller
* Executed program on FPGA and monitored using built-in performance tools

**Semi-RISC CPU**

* Designed and implemented 1-bit semi-RISC CPU on DE2 board
* Enhanced practical experience using VHDL as an HDL
* Administered appropriate control signals to data-path elements to achieve desired operation

**Function Generator**

* Designed and implemented function generator using Operational Amplifiers
* Generated desired square/triangle waveform per requirements
* Incorporated Voltage-controlled frequency, Frequency Range Select and Amplitude Control

**eCommerce System**

* Created interactive GUI using Java and JFrame library
* Designed program flow using UML User and Class Diagrams
* Implemented design and developed unit test cases for desired functionality
* Improved object-oriented coding techniques

**BJT Amplifier**

* Designed and implemented inverting 50V Amplifier with 20kHz bandwidth using 2 stages
* Generated functional simulations using NI Multisim
* Analyzed physical circuit using oscilloscope and multimeter

**Coffee Maker Hackathon**

* Redesigned household coffee maker for smart pouring addition
* Strengthened collaboration and communication skills
* Improved documentation skills through constant progress reports

# Education

## Bachelor of Engineering in Computer Engineering   June 2018

Ryerson University, Toronto, ON