BIRAJ KAPADIA

3A Electrical Engineering
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1 (519) 502-8719

SKILLS SUMMARY

- Hands-on experience with PCB circuit design/testing, soldering and prototyping
- Knowledgeable in using circuit simulators such as NI Multisim and SPICE
- Experienced in using laboratory tools such as digital multimeters and oscilloscopes
- Proficient in FPGA development using VHDL and ARM Assembly
- Competent in C, C++, C#, Perl, Visual Basic, MATLAB, JavaScript, and Java
- Skilled in hardware testing using NI LabVIEW TestStand to meet industry standards
- Demonstrated the ability to learn new concepts quickly and independently

PROFESSIONAL EXPERIENCE

Hardware Test Engineer, Alcatel-Lucent Jan 2015 – April 2015

- Reverse engineered router modules to summarize basic hardware functional blocks
- Improved debug guides by inspecting router modules to find new issues and their fixes
- Developed test scripts to validate products in manufacturing plants
- Performed investigations using production logs to find potential manufacturing issues

Signals Engineering Assistant, Toronto Transit Commission May 2014 – Aug 2014

- Verified and soldered PCB circuits for devices used to test subway signalling systems
- Developed software tools in C and C++, which were used with daily signalling investigations
- Created tools to analyze the performance of signalling equipment and predict failures

RELEVANT PROJECTS

Operational Amplifier, University of Waterloo Dec 2015

- Designed, prototyped and tested a fully functioning operational amplifier

Traffic Light Simulator, University of Waterloo Jul 2013

- Designed a traffic light controller with multiple modes of operation using LEDs, clocks, and several input signals that represented vehicles
- Gained experience in using an FPGA board and programming in VHDL

EDUCATION

Candidate for Bachelor of Applied Science, University of Waterloo 2012 - Present

- Relevant Courses: Electronic Circuits (Analog Circuit Design), Digital Circuits (Gate-level circuit design), Digital Computers (ARM Assembly), Algorithms and Data Structures (C++)

ACTIVITIES AND INTERESTS

- Enjoys playing cricket, badminton, darts, and billiards
- Takes a strong interest in reading books and listening to music