

## Education

### Bachelor of Electrical and Computer Engineering, 3<sup>rd</sup> Year

*Expected Graduation: 2016*

University of Toronto

**Relevant Courses:** Operating Systems, Computer Networks, Algorithms and Data Structures, Engineering Communication and Design, Engineering Economics and Analysis

## Technical Skills

- **Programming Languages:** C, C++, Assembly, Java, Matlab, Verilog
- **Tools:** PSpice, LT Spice, Valgrind, GNU Debugger, LEX & YACC, Wireshark, Argo UML, Microsoft Project
- **Hardware:** NIOS II processor, Quartus II simulator
- **Development Environment:** Eclipse, Net Beans, Linux
- **Version Control:** SVN, Git
- **Protocols:** HTTP, TCP, UDP, IPv4, IPv6, ARP, NAT, ALOHA, CSMA
- **Practice:** Software development and testing, Agile development, Unified Modeling Language, Technical writing
- Multi-threaded programming, Object-Oriented programming, Socket Programming

## Relevant Engineering Projects and Labs

### University of Toronto

#### Course Labs Operating Systems 2014

- Built thread library that supported thread creation, deletion, yield and mutual exclusion; preemptive/non-preemptive
- Utilized existing Pthread library to implement core functionalities of web-cache server
- Implemented Least Recently Used page replacement policy to handle pages in the web cache server

#### Course Management Software Communications and Designs 2014

- Added multithreading functionality and parsing mechanisms in the design
- Identified and Documented design issues, design alternatives, stakeholders' interests and potential actors
- Translated abstract design into UML sequence, and component diagrams using Argo UML software

#### Reaction Time Calculator Computer Organization 2014

- Programmed a Field Programmable Gate Array (FPGA) using Verilog to produce a simplified game that allows user to calculate their reaction time
- Wrote program in C and Verilog to handle various hardware components of the FPGA

#### Greenhouse Project Engineering Strategies and Practices 2012

- Collaborated with fellow team members to produce and evaluate creative greenhouse designs
- Presented the designs to the client to receive feedback as well as to ensure client satisfaction

## Work Experience

#### Assistant Manager Bukhara Grill, Fine Indian Cuisine June 2013 – January 2014

- Designed promotional flyers and arranged for neighborhood distribution in order to initiate customer traffic in newly established business
- Analyzed usage to determine the popularity of products and provided results to management for planning purposes
- Interacted with local businesses and business improvement committee of Bloor West Village to inform about the newly established business

#### High School CO-OP Student Hidi Rae Consulting Engineers Inc. September 2010 – June 2011

- Worked on basic AutoCAD drawings
- Printed and Scanned large sized drawings
- Organized books in terms of categories: industrial, residence, street, and sensors

## Extra-Curricular

- Marketing Strategist/ Videographer, **Toronto Nepali Film Festival** September 2012 – March 2013
- Working Committee, **Leaders of Tomorrow** September 2011 – December 2012
- Ambassador, **Engineers without borders**, Toronto chapter March 2012