Kunal Shah
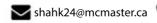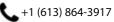
Software Engineering Student

shahk24@mcmaster.ca +1 (613) 864-3917 38 Northgate St. Ottawa, Canada

/in/shah-kunal /curiouskunal kunalshah.ca

EDUCATION

- **Bachelor of Software Engineering** // 2014 - Present
  McMaster University, Hamilton, Ontario
  - **3rd Year** - Software Engineering program

- **Shad Valley** // Summer 2013
  Engineering Entrepreneurship Program
  - McMaster University SHAD Alumni
  - Immersive summer enrichment program with focus on science, engineering, technology, entrepreneurship and leadership
  - Successfully completed time-constrained team project to develop a business plan and a prototype for human powered transportation in Canada

WORK EXPERIENCE

- NXP Semiconductors // Summer 2016
  Digital Circuit Design and Verification, Co-op
  Gatineau, Québec
  - Member of the IP Design team, developing and verifying the Image Cognition Processor IP used for advanced driver assistance systems(ADAS)
  - Created software model to emulate hardware behaviour from specification document
  - Developed automated C++ test suits to test software model
  - Pioneered process for the team to migrate Excel based hardware register definitions to be compatible with the Synopsys transaction level model (TLM) tool

- Canada Post // Summer 2013
  Shad Valley Internship, Strategic Analysis team
  Ottawa, Ontario
  - Completed research that helped Canada Post plan new services to strategically target youth
  - Developed and conducted an online survey to gather data on Canada Post services used by youths
  - Presented research findings to senior executives

- Ottawa Carlton District School Board // 2012 - 2014
  Audio/Visual Technician
  Ottawa, Ontario
  - Managed a team of technicians to set up, operate, maintain and repair audio visual equipment
  - Learned how to interface with clients to gather their requirements to plan equipment set up for productions

SKILLS

- Programming languages: C / C++, Java, Javascript, Python
- Linux, bash scripting
- Adobe Photoshop CC
- Application testing and verification
- Quick learner, Teamwork, Goal oriented
- Clear communicator: written and verbal

PROJECTS

- **Weather Station Analyzer** // Winter 2015
  Ruby , Javascript, Bash, SQLite3
  - Application uses 30 years of California weather data to analyze which weather stations can cease operations without affecting the overall weather prediction
  - Learned searching and graphing algorithms to create predictions.
  - Harnessed SQLite3 database for the data storage and manipulation
  - Used model view controller (MVC) software design pattern to connect the Ruby backend to the HTML front-end with a locally hosted REST server

- **Ultimate Tic Tac Toe Game** // Fall 2016
  Javascript, HTML, LaTex
  - Re-developed an existing open-source project to learn the benefits of the waterfall design process and proper documentation style
  - Created requirements documentation identifying functional and non-functional requirements as well as any assumptions made based on the Volere Requirements Specification Template
  - Learned to develop and document verification and validation using automated testing
  - Conducted beta tests with 30 students using usability survey to improve overall game user experience

- **C++ Expression Calculator** // Fall 2015
  C++
  - Application parses complex mathematical expressions then computes the results
  - Learned to use appropriate C++ class hierarchy and object oriented programing
  - Learned git version control and the benefits of working in a team environment
  - Developed random expression generator to thoroughly test the calculator