

# Kunal Shah

Software Engineering Student



shahk24@mcmaster.ca



+1 (613) 864-3917



5 Sussex St. Hamilton, Canada



/in/shah-kunal



/curiouskunal



kunalshah.ca

## EDUCATION

- **Bachelor of Software Engineering** // 2014 - Present  
McMaster University, Hamilton, Ontario
  - Completing final year, expected graduation: May 2019

## WORK EXPERIENCE

- IBM // Summer 2018  
**Software Developer, Co-op**  
Ottawa, Ontario
  - Worked on IBM Cognos Analytics as a Front-end developer.
  - Developed product features using React.js and JavaScript, based on requirements, design specifications and customer feedback
  - Assisted the team in their migration to Git from legacy version control
  - Set up the team's pipeline to run through Travis CI for GitHub code coverage and build status checks
  - Fixed critical bugs and defects for the next release of IBM Cognos Analytics
- NXP Semiconductors // Summer 2017  
**Digital Circuit Design and Verification, Co-op**  
Kanata, Ontario
  - Returning member of the IP Design team, developing and verifying the Image Cognition Processor IP used for advanced driver assistance systems (ADAS)
  - Establishing and developing new verification work flow for cycle accurate comparison between software and hardware models
  - Developed memory monitors, simulation work flow and related validation tests
  - Used Unified Verification Methodology (UVM), System Verilog and Synopsys tools for developing the embedded memory monitors
- NXP Semiconductors // Summer 2016  
**Digital Circuit Design and Verification, Co-op**  
Gatineau, Québec
  - Created software model to emulate hardware behaviour from specification document
  - Developed automated C++ test suites 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

## SKILLS

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

## PROJECTS

- **Bank Machine** // Fall 2017  
React, JavaScript, CSS, Webpack
  - User Interface design concept project that mimics touch screen Bank Machine
  - Designed and implemented UI using Don Norman's Design Principles of everyday things
  - Followed Agile design process
- **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
- **Weather Station Analyzer** // Winter 2015  
Ruby, Javascript, Bash, SQLite3
  - Application uses California's weather history to analyze which weather stations can cease operations without affecting the overall weather prediction
  - Learned searching and graphing algorithms to create predictions.
  - Used model view controller (MVC) software design pattern to connect the Ruby backend to the HTML front-end with a locally hosted REST server

## EXTRACURRICULARS

- Shad Valley Alumni 2013
- IBM intern Hackathon 2018
- Delta Hacks McMaster Hackathon 2014 - 2018
- McMaster Phase One Technology Community
- Downhill Skiing