

# TYURINA NIMALAKUMAR

## 2A Mechatronics Engineering

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tyurina.github.io

### Summary of Qualifications

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- Well versed in **C++**, **C**, and **Ladder Logic (PLC)** through course and project work
- Self-taught **VB**, **MS SQL**, **JAVA**, **XML**, **JavaScript** and **HTML/CSS** for personal projects
- Experienced in **Solid Works**, **AutoCAD** and **GD&T** by creating engineering drawings

### Work Experience

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#### Application Developer | Toronto Transit Commission

May - Aug. 2015

- Maintained a regularly used in house application (DPR) that archives all legacy TTC engineering drawings
- Organized and developed a search engine to increase efficiency of DPR using VB and C#
- Updated SQL server database and polished searching scripts using SQL queries
- Exceptional communication skills developed from preparing and presenting business plans to executives

#### Special Needs Camp Counselor | City of Brampton

June - Aug. 2014

- Supervised and organized daytime activities for teenagers and adults with a variety of disabilities
- Demonstrated **positive customer service** and was requested for additional contract work

### Projects

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#### Personal Website

Sept. 2015

- Built with Jekyll and developed using HTML /CSS to display up to date information about personal projects

#### Helping Hand Android App

Sept. 2015

- Collaborated with 3 peers to make a platform to post and assist others in achieving personal goals
- Customized the UI with Java/ XML and integrated Moxtra API to include a chat feature

#### Automated Transportation Robot

Dec. 2014

- Constructed a custom **NXT robot** to navigate and retrieve an object in an obstacle course
- Generated turning and lifting algorithms with C++ to control movement with NXT sensors
- Modeled a forklift mechanism using AutoCAD

#### Hydrogen Fuel Cell Car

Oct. 2014

- Used **MSP 430 microcontroller** to program a fuel cell car to follow a line around a terrain
- Won 1st place for efficient use of hydrogen fuel cells

### Volunteer Experience

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#### Peel Senior Home Volunteer

2013 - 2014

- Coordinated entertaining activities for seniors (ex. bowling, gardening etc.)
- Assisted with personal care including feeding and shopping

#### Leader, Fundraiser for Haiti

May 2013

- Organized a school wide coin drive that fundraised **\$2700.00** for a Haitian charity

### Education

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#### Candidate for BAsC, Mechatronics Engineering, University of Waterloo

2014 - Present

- Waterloo President's Scholarship of Distinction (95%+ average)

#### Notre Dame Secondary School, Brampton

2010 - 2014

- International Baccalaureate Diploma & French as a second language certificate

### Clubs and Interests

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- Member of Waterloo BioRobotics Club
- Travelling & Geography
- Website design & development
- Tae Kwon Do & Playing the Guitar