

# RAYYAN GHANI

rghani03@gmail.com

2A Mechatronics  
Engineering

rayyanghani.me

## SUMMARY OF QUALIFICATIONS:

- Proficient in **C++** and **Arduino programming language**
- Experience in **HTML, CSS, Javascript, jQuery**
- Worked with **AUTOCAD** and **Solidworks**
- Thorough understanding of circuit theory and use of oscilloscopes and multi meters

## WORK EXPERIENCE:

**Toronto Transit Commission (TTC)**

**May 2015-August 2015**

**Information Security Office (ISO) – Information Security Administrator**

**Toronto, Canada**

- Conducted and analyzed web application security tests using IBM AppScan Standard
- Assisted ISO in attaining compliance with the Payment Card Industry Data Security Standard (PCI DSS)
- Attained experience in using IBM AppScan Standard
- Grasped a detailed understanding of common web application vulnerabilities
- Gained a basic understanding of information security and recognized standards

## TECHNICAL SKILLS AND PROJECTS:

**Safe Night Device + Safe Night Android App**

- Created a Bluetooth-controlled lock with a display and a temperature sensor to monitor and secure a small environment
- Arduino Bluetooth library was used to receive lock commands from an Android app (in development)
- Parts Used:
  - Arduino Uno
  - HC-05 Bluetooth Module
  - Servo Motor – used as lock
  - Temperature sensor

**Fuel Cell Car Project**

- Powered a small robotic car using a Proton Exchange Membrane (PEM) fuel cell
- Programmed car to follow a black line accurately with a time constraint using C++
- Learned how to work with MSP430 microcontroller and maintain a fuel cell's performance

**LEGO NXT Final Project**

- LEGO NXT held two containers and four sensors, coded in C++ to autonomously dispense seasonings
- Engineered a spice dispensing mechanism: used band saws, sanders, drill presses, and hand tools to build the part

## VOLUNTEER EXPERIENCE:

**2014 Guatemala Volunteer Service Trip**

- Developed public speaking skills, and learned how to multitask trip responsibilities with schoolwork and clubs
- Responsible for marketing idea to stakeholders and parents, co-ordinating logistics for the trip, and leading the fundraising efforts for this initiative, raising close to \$5000

**Oakville Trafalgar Memorial Hospital Volunteering (OTMH)**

**(June 2011 – May 2014)**

- Gained interpersonal skills with co-workers, supervisors, and patients,
- Volunteered for 3 years assisting Patient Assistant Liaisons
- Tasked with serving meals, filing reports, and transporting specimens

**2012 Summer Youth Leadership Development Program (YLDP)**

- Understood how to implement ideas into fundraisers, and improved interpersonal skills with group members
- Planned, organized, and promoted fundraisers in Mississauga

## EDUCATION:

**Candidate for Degree in Bachelors of Applied Science –Honours Mechatronics Engineering (Co-Op), University of Waterloo, Sept 2014-Present**

- Granted Waterloo Presidential Scholarship of \$2000

**Ontario High School Diploma -Iroquois Ridge High School (IRHS), Oakville, Ontario**

- 96% Average
- Award for Academic Excellence
- Highest mark in Grade 12 Physics

## PROFESSIONAL MEMBERSHIPS, ACTIVITIES AND AWARDS:

- Granted bursary of \$1000 for excellence in hospital volunteering
- Elected for an executive position as the International Chair of the Interact Rotary Club at IRHS
- 1<sup>st</sup> Place in high school debate competition held at York University