# Zaki Ahmed

# Mechatronics Engineering | University of Waterloo

## **SUMMARY OF QUALIFICATIONS**

- Proficient with C, C++, PHP, JavaScript/JQuery, Java, Python, and Bash
- Adaptable with a proven ability to learn new skills in short periods of time
- Strong communication and interpersonal skills; enhanced through past experience as a sales associate
- Interested in Automation, Robotics, UI/UX, Hardware Design, Web Design, Back-end programming, Electrical Design, PCB Design

- Finished 1A, 1B and 2A term in excellent academic standing; 83% Cumulative Average (3.7 GPA)
- Practical work experience with Front-End Web Development, Scripting/Automation, Mobile Dev, IP networking/Communications Technologies,
- Practical Experience with TCP/IP Networking, Lab work (Soldering, debugging, data acquisition), Embedded Systems/MicroControllers, Analog and Digital Circuit Design, HTTP & REST

#### **WORK EXPERIENCE**

WEB DEVELOPER INTERN/SYSTEMS ADMINISTRATION AUGSIGNALS LTD, TORONTO ON

May 2017 – Aug. 2017

- > Created/Implemented Company-wide LDAP Server/Directory Service and VPN Server
- > Created a Secure Automated Self-Registration webpage on the company intranet with a validation script to populate/modify employee information on the LDAP server
- > Designed and Built an interactive and responsive single-page product website with dynamic components

QA ANALYST/SOFTWARE DEVELOPER, ROUTETHIS, KITCHENER ON

Sept. 2016 – Dec. 2016

- Made major contributions to design and creation of network-analytics app that integrates company API framework used by major IOT/audio companies like Dyson, Klipsch, Petsmart among others
- Wrote/designed a script and webpage to dynamically track performance-based statistics in real time for employees
- > Tested and debugged multiple iOS and Android applications throughout all stages of app lifecycle

#### **OTHER EXPERIENCE**

MTE FINAL PROJECT, UNIVERSITY OF WATERLOO, WATERLOO, ON

Oct. 2015 - Dec. 2015

- Constructed/designed a Lego NXT robot, among a team, able to navigate and dispense cups autonomously
- ➤ Programmed and debugged robot made of actuators and optical sensors in C++ to set up pong games
- Achieved success rate of over 95%

MARBLE RACE GAME, SIDE PROJECT, WATERLOO, ON

Jul. 2017 – Aug. 2017

- Designed and built a marble racing game through Unity Game Engine and C# scripts
- Incorporates time component, dynamic pick-up objects and points system

WATERLOO FORMULA ELECTRIC CAR TEAM, UNIVERSITY OF WATERLOO, WATERLOO, ON

Jan. 2017 – Apr. 2017

Member of the electrical division of the Waterloo Electric Car Team whose goal is to fully design and build all parts of a fully functioning formula electric car

➤ Working amongst a team on PCB design for the data acquisition board FUEL CELL CAR PROJECT, UNIVERSITY OF WATERLOO, WATERLOO, ON

Oct. 2015 - Nov. 2015

- Constructed/designed an autonomous fuel celled vehicle, capable of navigate obstacle courses
- ➤ Programmed, tested and debugged the car in C++ on an IAR Embedded Workbench to use optical sensors and line-following algorithms

#### **EDUCATION**

UNIVERSITY OF WATERLOO, WATERLOO, ON

Sept. 2015 - present

## Candidate for Bachelor of Applied Science, Mechatronics Engineering (Class of 2020)

- ➤ Relevant Courses: Algorithms and data structures, Digital Computation, Circuits, Sensors and Instrumentation, Linear Systems and Signals
- > Currently a member of the electrical division of the Waterloo Electric Car team