


# Devansh Vaid

Mechatronics Engineering | ID# 20569300

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## Skills

**OPERATING SYSTEMS:** Mac OS X, Windows 7, Windows 8, Android, iOS

**PROGRAMMING SKILLS:** C++, Visual Basic 6.0, HTML, CSS, jQuery, familiar with the Arduino Language

**SOFTWARE:** AutoCAD, SolidWorks, Microsoft Office (Word, Excel, PowerPoint)

**TOOLS:** Xcode, DEV C++, SourceTree, Bootstrap

**OTHER:** PLC and Ladder Logic

### **CHARACTERISTICS AND ATTRIBUTES**

- Exceptional communication and problem solving skills developed through volunteer experience with Alzheimer's patients and instructing swimming classes for various ages
- Self-driven to expand engineering knowledge and skills as demonstrated through personal projects
- Strong team work skills exhibited through participation in various successful team projects and executive teams for extracurricular clubs

## Work Experience

### **iOS Software Tester, ThinkDirty® Shop Clean, Toronto**

**May 2015 - June 2015**

- Tested iOS app for bugs, potential areas for improvements and helped locate crashes
- Programmed fixes for bugs and crashes using Objective-C and Xcode
- Regularly used GitHub and SourceTree to initiate pull requests and commits

### **Systems Maintenance, AutoHub, Hamilton**

**May 2013 - September 2014**

- Installed and set-up computers, Wi-Fi, cloud storage and various computer programs
- Updated inventory information on website and offered regular technical support

### **YouTube Instructional Video**

**August 2012**

- Created and monetized instructional video on YouTube, receiving over 80,000 views
- Attained positive feedback while continuing to support and guide viewers

## Personal Projects and Hobbies

### **Resistance Calculator App, iOS (Swift/Objective-C)**

**April 2015-**

- Currently programming an iPhone 5 application designed to determine the resistance from resistor coloured stripes. (Interface available on GitHub, the full app is in-progress)
- Learning the Swift and Objective-C language through books and online tutorials. Programmed a 100 Facts app that displayed a new fact after a button press

### **Arduino Autonomous Robot and other projects**

**March 2014-**

- Designed and constructed various breadboard circuits with the Arduino micro-controllers
- Experience with several soldering projects such as motor shield kits
- Familiar with the use of basic electric components through self-initiated exploration
- Currently designing and programming an autonomous Arduino robot

### **PinBall Game, Visual Basic 6.0**

**2012**

- Problem solved various challenges such as accurate paddle function and collision detection
- Evaluated and implemented several revisions to constantly improve the program

## Relevant Course Projects and Training

### **Autonomous Lego Grab and Retrieve Robot, Mechatronics, C-Based Language** **November 2014**

- Designed and programmed an autonomous Lego Mindstorms robot while implementing the use of various sensors and 3D printed components, in a group of 4
- Hypothesized and evaluated various Mechanical design implementations to optimize sensor attachment, chassis design and object detection

### **Hydrogen Fuel Cell Car, Mechatronics** **November 2014**

- Programmed and debugged a line-following Hydrogen Fuel cell car using C++ while ensuring efficient power consumption

### **Freehand Sketches, Graphics and Design** **September 2014 - November 2014**

- Freehand sketched various objects containing orthographic projections, isometric views, continuous and baseline dimensioning, different line types and helices

### **Engine Dissection Lab, Mechatronics** **October 2014**

- Disassembled and reassembled an engine while observing the functions of various components
- Derived the torque, horsepower and efficiency of the engine from a Dyno Chart

## Education & Professional Development

### **Candidate for Bachelors in Applied Sciences (BASc) in Mechatronics Engineering** **September 2014-**

### **International Baccalaureate (IB) Diploma, Glenforest Secondary School** **September 2010 - July 2014**

- Achieved final average of 96%; Honour student throughout high-school

### **President's Scholarship of Distinction, University of Waterloo, Ontario** **July 2014**

- Awarded for holding an admission average above 95%

### **2012-2013 Diversicare Volunteer of the Year** **June 2013**

- Presented for ongoing dedication as a volunteer at the Evergreen Retirement Community.
- Interacted weekly with Alzheimer's patients and involved them in various activities

## Volunteer Experience

### **Volunteer, Evergreen Retirement Community, Mississauga, Ontario** **January 2012 - July 2014**

- Helped elders with Alzheimer's disease get involved in activities such as Bingo and Word Games
- Regularly helped out at events such as Easter, Valentines Day and Christmas celebrations

### **PLASP, Mississauga, Ontario** **November 2012 - May 2014**

- Volunteered for after-school childcare program with children from Grades 1-5
- Initiated activities and motivated children to be involved, while resolving disputes and ensuring safety

## Extracurricular Activities

### **Head of Activities, Social Justice Action Committee, Mississauga, Ontario** **September 2012 - July 2014**

- Worked cooperatively with an Executive team to plan and organize charitable events
- Focused on the issues of inequality evident in children with physical and mental disabilities
- Organized fundraisers and community events to spread awareness

**Hobbies and Interests:** Stock Market, Swimming, Astronomy and Astrophotography