

Hernando Castano

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SKILLS

PROGRAMMING

Experienced in:

Java

Familiar with:

Android • AngularJS • Arduino
C/C++ • Express.js • HTML/CSS
JavaScript • LaTeX • MongoDB
Node.js • Python • Ruby

TOOLS

Experienced in:

Android Studio • Eclipse • Git

Familiar with:

Vim • VirtualBox • Visual Studio

OPERATING SYSTEMS

Experienced in:

Windows • OS X • Ubuntu
CentOS 6 • CentOS 7

CAD

Familiar with:

AutoCAD • SolidWorks

EDUCATION

UNIVERSITY OF WATERLOO

B.A.Sc IN MECHANICAL

ENGINEERING (CANDIDATE)

Expected April 2020 | Waterloo, ON

Cumulative GPA: 3.79

W.L MACKENZIE C.I

ONTARIO SECONDARY SCHOOL

DIPLOMA (HONOURS)

Grad. June 2015 | Toronto, ON

DISTINCTIONS

Scored 5/5 on AP Computer Science
Exam 2015

LANGUAGES

Can communicate proficiently in
Spanish, both verbally and written.

INTERESTS

Running
Swimming
Mobile Technology
Aviation

WORK EXPERIENCE

UNIVERSITY HEALTH NETWORK | BIOINFORMATICS RA

May 2016 – Present | Princess Margaret Genomics Centre

- Worked with the MEAN stack to develop various web applications.
- Independently developed a system used by labs to share confidential files.
- Deployed and maintained an OpenID Connect server and client application.
- Created a web tool to verify sample identification data for lab technicians prior to running experiments.
- Provided technical support to labs and research teams looking to get web sites hosted.
- Received an outstanding review at the end of the work term.

RYERSON RAMS ROBOTICS | TEAM MEMBER

July 2016 – Sept 2016 | Ryerson University

- Participated in both the Mars Rover and VexU Robotics teams.
- Verified that electronic components were working by writing C programs.
- Researched cost and performance effective solutions for the construction of the robotic arm on the Mars Rover.
- Built prototypes independently and with a team in order to validate the different Vex design options.
- Fixed various electronic and mechanical devices around the shop.

PROJECTS

HANDY DANDY | ELECTROMECHANICAL PROJECT

Feb 2016 - Mar 2016 | First Year Design Project

- Designed a robotic hand capable of performing gestures and lifting objects.
- Lead the development of the software used to control the project.
- Independently designed the fingers and palm using SolidWorks.
- Gained experience working with 3D printers, which were used for manufacturing the hand.

GO, GO, MYO ROCKET! | HACKATHON PROJECT

Nov 2015 | EngHack

- Created a flight simulator using Unity's 3D game engine.
- Allowed human interfacing using multiple Myo armbands.
- Created scripts using C# in order to control flight aspects and allow for more realistic character movement.

MYO EMG REPLACEMENT | PERSONAL PROJECT

Nov 2015 - Dec 2015 | Deloitte Tech Exchange

- Worked with the Myo armband with the goal of replacing electromyographic machines in a medical setting.
- Analyzed the raw output given by the Myo, converting it into information usable by medical practitioners.
- Using the Myo to perform EMG tests would allow for the replacement of \$10,000 machines, as well as improve the test for patients and doctors.