# Julian Pettit

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## **EDUCATION**

#### **UNIVERSITY OF WATERLOO**

BASC IN MECHATRONICS ENGINEERING

Expected April 2020 | Waterloo, ON

## PORT PERRY HIGH SCHOOL OSSD

Grad. June 2015 | Port Perry, ON

## **SKILLS**

#### **PROGRAMMING**

Proficiency:

C++ • C# • SQL • Java • Ruby JavaScript • Python • Bash Working Knowledge: Rails • Android • PHP • .NET Version Control

Git • SVN

#### **LANGUAGES**

English • French • German

## **COURSEWORK**

#### **UNDERGRADUATE**

Data Structures and Algorithms Digital Logic and Circuits Microprocessor Interfacing Real-time Systems Numerical Methods Statistical Analysis

## VOLUNTEERING

#### MATH AND FRENCH TUTOR

- Provided learning assistance to elementary students from the community library
- Raised individual course grades by an average of 10% per student

#### MÉTIS AMBASSADOR

 Represented the Durham Métis community at the DDSB Louis Riel Day ceremony

#### **ROTARY INTERNATIONAL**

- Set up and prepared venues for the local Rotary Club
- Managed inventory, oversaw guest lists, parking, and seating

## **VOCATIONAL EXPERIENCE**

## VIRTEK VISION INTERNATIONAL | SOFTWARE ENGINEERING INTERN December 2016 – April 2017 | Waterloo, ON

- Built and released laser projection software for high profile clients including over 100 fortune 500 companies
- Wrote integration program to allow 6 language packs to be interpreted and displayed by the laser projection software
- Tested aerospace manufacturing processes for quality and defects, working directly with customers to resolve issues
- Increased test suite coverage by 50% on specific product features to accelerate QA acceptance process
- Demonstrated the projection system progress to the CEO of Virtek's parent company

## **INNOVASIUM DIGITAL** | WEB APPLICATION DEVELOPER

April 2016 - August 2016 | Markham, ON

- Created large sections of custom workflow web applications to help large corporations meet productivity goals
- Improved legacy code on a company product used by multi-million dollar companies by converting to a React framework
- Built and linked personalized invoicing forms to customer databases using SQL and Ruby on Rails
- Researched and implemented solutions to specific customer requests, coordinating results with the senior developers

## LEADERSHIP EXPERIENCE

| 2017 - Present | Orientation Leader   | Waterloo Engineering Society |
|----------------|----------------------|------------------------------|
| 2016 - Present | Financial Executive  | UW Kendo Club                |
| 2015 - 2016    | Class Representative | Waterloo Engineering Society |
| 2012 - 2015    | Leadership Head      | PPHS Student Council         |

## **PROJECTS**

## JIRA HISTORICAL ANALYTICS PROGRAM

- Used a REST API to scrape and store time estimation data from the JIRA project management software
- Wrote C#/C++ program to deserialize, sort, and output data to a spreadsheet
- Generated analytics for estimated/actual time spent on issues, highlighted largest discrepancies and automated plotting of data

#### RASPBERRY PI RADIO BROADCASTER

- Constructed a short range FM radio for broadcasting music
- Upgraded antenna to allow for a 75 meter range
- 3D printed a custom case to increase aesthetics and durability

#### INTERESTS

- Homemade electronics using micro computers and radio-controlled systems
- Physical activities including bicycling, hiking, camping, and martial arts
- Literature, tabletop RPGs, and language study