

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

HARDWARE

PCB Soldering • Circuit Measurements
SolidWorks/AutoCAD • MATLAB

SOFTWARE

C++/C#/C • SQL/Postgres • Python
JavaScript/React/Redux • Ruby/Rails
Unix • Node.js • Git • SVN

LANGUAGES

English • French • German
Canadian/German Dual Citizenship

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 hardware and software 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 at milestone review meetings

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 across the 93.1 frequency using a micro computer and home-made antenna
- Upgraded antenna across several designs 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