

Education

McMaster University 2018 - 2022
Level 3 Honour Award Scholarship
GPA: 11.7/12

London Central Secondary School
2014 – 2018
Graduating Average: 94.5%
Schulich Scholarship School Nominee

SAT I & II

SAT I Grade: 1480/1600 SAT II Math Level 2: 760/800 SAT II Physics: 740/800

Relevant Coursework

- **2DI4 Logic Design:** Computer logic design course introducing the fundamental components of computers
- **2CI5 Intro to Electrical Eng:** Course in building and analysing digital and analog circuits
- **2SH4 Principles of Programming:** Programming course on C and Java
- **1D04 Engineering Computation:** Programming course on Python

Work Experience

Lyons New Media Center Student Assistant

09/2019 to present

- Manages the help desk at the Lyons New Media Center in Mills Library on campus.
- Operates and maintains 3D printers for student use
- Manages and maintains the equipment and center, including our audio recording and video editing booths

McMcaste University - Materials Engineering Undergraduate Research Fellow

05/2019 to 09/2019

- Conducted research and experiments on steel phase transformation to improve manufacturing consistency in steel rolling mills
- Characterized the structure of new high strength steel developed by Stelco Holdings Inc.
- Conducted FEA simulations using Abaqus CAE on UNIX to develop aluminum honeycomb structure for military body armour
- Gained experience and training on optical microscopy, SEM, APT, FIB, Abaqus CAE and working under UHV

A&L Canada Laboratories - Project: CAD and Prototyping Chemical Filter Paper Folding System

09/2018 to Present

- Design and fabrication of a folding system for chemical filter papers
- Parts were designed on Autodesk Inventor and printed on Creality CR-10 3D printer

Founder and Owner of V for Design Start-up Graphic Design Company

07/2017 to 07/2018

- **Nancy Campbell Academy - Web Developer and Graphic Designer (2018)**
Developed a new, user friendly and interactive website and a new set of business cards for Stratford based private school Nancy Campbell Academy using Wordpress, HTML and media software such as Photoshop, Illustrator
- **Lamko Tool & Mold co. - Intern Website Developer (2017)**
Developed an innovative website using HTML in conjunction with Photoshop and Illustrator to replace outdated website and led discussions in board meetings

Extracurriculars

MAC Formula Electric Racing - Aerodynamics Project Lead

09/2018 to Present

- Designed, simulated and manufactured FSAE compliant electric vehicles with team of 100 engineering students.
- Led a team of 10 students to research and design new active aerodynamics system in rear wing
- Designed and manufactured accumulator and low voltage systems
- Completed FAE simulation and fabrication of the aerodynamics package

Junior Achievement Company Program - Management Position in 4 Student-run Start-up Companies

10/2014 to 04/2018

- Produced 200% return on equity by creating online marketing or sales campaigns, ran local sales events, and negotiated sponsorships or bulk sales from local businesses and at the end of each company term

Personal Information

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LinkedIn

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Portfolio

http://ridvansong.wixsite.com/website

Awards

DeltaHacks VI Hackathon

Third Place Overall Winner (2020)

- 3rd place team out of 250 teams
- Created an iOS app which uses AR to visualizes 3D objects and automatically prints them on your 3D printer

1P03 Engineering Profession and Practice Design Competition Showcase Presenter and Top 10 Finalist (out of 240 teams) (2018)

Junior Achievement Company Program

- 3rd place out of 20 teams in the annual Dragon's Lair Pitch Competition (2018)
- President, VP of Information Technology, VP of Sales
- Top 3 VP of IT in London (2017)

Skills and Projects

Building a breadboard CPU from scratch using standard cells and a 64-bit RAM

Programming Python Chess Game and AI using machine learning, the Markov Decision Process and ADTs to store chess datasets

Programming Languages: C, Python, Java, MATLAB, HTML, Verilog, Unix, Swift

Hardware Skills: Circuitry and Arduino experience (Breadboarding, building and using standard cells), Raspberry Pi, 3D Printing (CAD, rendering on Cura, troubleshooting, maintenance and repair)

CAD and Finite Element Analysis: Cura, SolidWorks CAD and simulation, Autodesk Inventor, Abaqus CAE

Media: In-depth DSLR photography knowledge, Illustrator, Muse, Dreamweaver, Photoshop, Aftereffects, Premier