

SKILLS SUMMARY

Software: C++, C, C#, Python, Java, JavaScript, HTML/CSS, Git, Linux OS, SQL, .NET
Data Software: LabVIEW, MATLAB
Hardware: DAQ, Sensors, Circuits, Soldering
Mechanical Design: SolidWorks, AutoCAD, GD&T

EDUCATION

University of Waterloo, Waterloo, ON 2019-2024
BASc in Mechatronics Engineering
President's Scholarship of Distinction
Related Courses: Data Structures & Algorithms (C++), Linear Algebra, Circuits, Engineering Graphics and Design

EXPERIENCE

System Engineer, Toyota Motor Manufacturing Canada Jun. 2020 – Aug. 2020

- Developed an email alert application that retrieves Global Assembly Line Control (GALC) data from Oracle, Microsoft SQL Server, and PostgreSQL databases in **C#** and **.NET** framework.
- Used predictive analytics with Microsoft Azure Machine Learning, **SQL**, and Power BI to visualize and analyze data for Toyota's Inspection Computer System (ICS).
- Generated data visualizations in Power BI and provided technical support for Toyota's GALC system.
- Set up and configured computer software systems and drivers.

Neuromechanics and Assistive Robotics Lab, University of Waterloo Sep. 2018 – Jul. 2019
Muscle Stress and Contraction Regression Analysis

- Performed non-parametric regression analysis using **Python** to find the relation of muscle tension and contraction.
- Developed a regression model based on least squares from calibration trials to display muscle control movements.

Smart Shoe Insole

- Created a shoe sole targeted towards Parkinson Disease patients for real-time estimate of foot clearance using data points collected from force sensing resistors (FSR) and a DAQ device.
- Built an 8-channel digital input circuit model to measure the output of FSR and utilized **LabVIEW** for data logging.

UI/UX Designer, Maple Precision Jul. 2018 – Mar. 2019

- Created a UI prototype of an interactive mapping software to allow users to acquire geological data.
- Designed web platform mock-ups by assessing SEO strategies to increase website traffic by 40%.
- Recreated company logo, event banners, and business cards using Adobe Illustrator.

PROJECTS

Slot Machine, Java Game

- Developed a slot machine game in **Java** that stimulates a sequence of randomized numbers.
- Designed a GUI that allows users to interact with the game by implementing Java Swing components.

ProstHand, Robotic Arm

- Built a prosthetic hand and interfaced touch and gyro sensors to perform movements such as grasping, pinching.
- Implemented a PID motor control algorithm in **C** to actuate a robotic hand with 93% accuracy.

AWARDS

Dr. P. S. Ahuja Award for Women in STEM, Waterloo, ON Aug. 2019
Awarded based on academic excellence to one UWaterloo female student enrolled in a STEM program.

DECA Internationals 2nd Place, Orlando, FL Apr. 2019
Developed and pitched a business idea that won second place amongst 200+ competitors around the world.

Two-Time DECA Provincial Champion, Waterloo, ON Feb. 2018/19
Placed top 7 in Ontario for developing a business model; 4.1% acceptance rate and 10,000+ competitors.

Level 10 Piano, Waterloo, ON Jun. 2017
Received First Class Honours for the highest level in piano from the Royal Conservatory of Music.

ACTIVITIES

Women in STEM President & Co-Founder, Waterloo, ON

- Ran a high school club that provided guidance and resources for young girls who are interested in STEM.