

Kevin Mukalel

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EDUCATION

UNIVERSITY OF WATERLOO

Bachelor of Applied Science
Candidate - 2022

ACADEMIC REP

ELECTED BY THE CLASS OF
MECHATRONICS, 2022.

Responsible for communicating
with the faculty of engineering
regarding academic concerns.

ST. MARY'S HIGH SCHOOL STUDENT COUNCIL | PUBLICITY REPRESENTATIVE

Proficient in written/oral
communication as well as digital
content creation

SKILLS

SOFTWARE

JavaScript
Python
C++
MATLAB
HTML
CSS
VBA
mQuery
SQL
PL/SQL
Oracle Apex
Git
Relational Databases
Firebase
Bootstrap
Data Structures & Algorithms
Agile Development

MECHANICAL

SolidWorks
Soldering
AutoCAD
Onshape
Desktop CNC Milling
Manual Milling
Lathing
3D-Printing
Circuit Theory

ACTIVITIES/INTERESTS

Self-taught Musician
Rock Climbing
Martial Arts

EMPLOYMENT EXPERIENCE

SOFTWARE DEVELOPER | BLACKBERRY

Kitchener, Ontario | January 2021 – August 2021

- Re-designed Salesforce applications to incorporate dynamic appearance according to user profile
- Worked with JavaScript to parse client input data and render knowledge articles
- Programmed Apex triggers to execute safety maneuvers in order to protect data
- Led team meetings to engage co-workers and provide demonstrations of updated tasks in an Agile Development environment

SOFTWARE TOOLSET DEVELOPER | ATS AUTOMATION

Cambridge, Ontario | September 2019 – December 2019

- Created VBA scripts to enhance, organize and automate data in excel
- Wrote scripts in the mQuery language to perform data analytics
- Designed interactive SharePoint pages and features using custom CSS

WEB APPLICATIONS DEVELOPER | TORONTO WATER DIVISION

City of Toronto, Scarborough, Ontario | January 2019 – April 2019

- Developed secure web applications through the Oracle Apex platform
- Produced SQL Scripts to organize data into Relational Database Systems
- Developed PL/SQL procedures in Apex to implement automatic emailing programs to reduce the workload of supervisors responsible for weekly emails
- Wrote triggers in Apex to capture changes made to critical data in city applications

FULLSTACK DEVELOPER | CONRAD SCHOOL OF ENTREPRENEURSHIP

Communitech Data Hub, Waterloo, Ontario | May 2018 - July 2018

- Designed and implemented the landing page, profile page and several other pages for a skill sharing platform using HTML, CSS and JavaScript
- Implemented login and logout functions and securely stored client information by embedding Firebase's authentication and Realtime database services
- Developed several responsive web pages for screen sizes of various resolutions for optimal viewing on any device

HARDWARE ENGINEER/MECHANICAL DESIGNER | SIENCI LABS

Accelerator Centre, Kitchener, Ontario | July 2018 - August 2018

- Designed components for desktop CNC milling using Onshape and SolidWorks
- Drafted dimensioned drawings using baseline dimensioning and GD&T
- Modified simple circuit schematics using Eagle

EDUCATIONAL EXPERIENCE/PROJECTS

PYTHON GENETIC PROGRAMMING PROJECT | 2021

- Wrote Python scripts to simulate Genetic Programming, Tabu Search, BFS and DFS algorithms

COVID UV DISINFECTION CHAMBER PROJECT | 2020

- Designed chamber on SolidWorks to minimize 3D printing costs while optimizing structural integrity; ran lighting simulations to ensure disinfection of all surfaces

UWATERLOO FORMULA ELECTRIC DESIGN TEAM | 2017 – 2018

- Designed the vehicle's rear tripod housings and steel inserts on SolidWorks
- Ran SolidWorks configurations to determine the optimal half-shaft length, accounting for Camber and Toe angles
- Fabricated mounting plate to secure electric car motor for dynamometer testing