

# Mark Wong (He/Him), Electrical Engineering

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## TECHNICAL SKILLS

### Software

- Solidworks/GrabCAD/KiCAD
- C/C++/Java
- Python 3
- Microsoft Office 365
- Matlab/Simulink

### Hardware

- Circuit Analysis/Design
- Arduino
- FPGA
- Verilog

### Certifications

- WHIMS
- Learn Python 3 Certificate
- COVID-19 Workplace Safety
- Preventing and Address Workplace Bullying and Harassment Training

## EDUCATION

University of British Columbia

*Bachelor of Applied Science - Electrical Engineering, Biomedical Option*

Expected May, 2003

## WORK EXPERIENCE

M2/W2 Association, Abbotsford, BC

*Training and Support Analyst*

May, 2021 – Present

- Trained ~20 staff members on Microsoft Office 365 products (Teams, OneDrive, SharePoint, Word, Excel, and PowerPoint) as part of change management
- Provide technical support via MS Teams for staff requiring technical assistance

Robert Nimi Nikkei Home, Burnaby, BC

*Work Experience Student*

August, 2017 – September, 2017

- Repaired residence's appliances
- Renovated floors
- Painted/filled walls

## TECHNICAL PROJECTS

Submarine Control System, SUBC

September, 2020 – August, 2021

- Designed a compact circuit capable of being placed in a specified waterproof enclosure
- Programmed arduino to allow for variable propulsion speeds

Inductive Metal Detector, UBC

March, 2021 – April, 2021

- Designed a circuit to detect changes in frequency when the inductor encounters metallic objects
- Programmed ATMEGA328P microcontroller to determine classification of metal types

Cup Capacitor, UBC

February, 2021 – March, 2021

- Designed to facilitate operation by visually impaired users
- Constructed a circuit to detect changes in capacitance when water is poured into cup
- Programmed 8051 microcontroller to play audio to inform user how full their cup is

## ENGINEERING STUDENT TEAMS

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SUBC, UBC

June, 2021 – Present

### *Propulsion Team Lead*

- Organizing budgets and team meeting documentation
- Assigning tasks and coordinating with team members
- Designing and implementing electronic system to propel submarine

SUBC, UBC

October, 2019 – June, 2021

### *Propulsion Team Member*

- Aided in the design and development of a non-propeller-based, manta ray inspired submarine
- Placed 3rd and 2nd at the European International Sub Race (EISR) 2020 and EISR 2021 respectively
- Developed state machine for submarine prototype
- Oversaw electronics development to meet motor and safety requirements

## VOLUNTEER EXPERIENCE

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Burnaby Government, Burnaby, BC

September, 2018 – May, 2019

### *Youth Voice Committee Member*

- Planning and running events to increase youth engagement with the city community
- Advised and gave input on civic issues that impact youth
- Received Youth Citizenship Award in recognition of my contributions to the youth in Burnaby

Vancouver Aquarium, Vancouver, BC

August, 2015 – September, 2016

### *Gallery Assistant Work Experience (WEX) Student*

- Interacted with guests to ensure quality visitor experience
- Managed line-ups for ticket purchases
- Assisted in memberships and ticket verification
- Assisted with general guest inquiries at the information desk

## AWARDS

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UBC Dean's List

2019 - 2020

Youth Citizenship Award

2019

BC Achievement Scholarship

2019

## PROFESSIONAL AFFILIATIONS

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First Aid Lifesaving Society

2015

## INTERESTS & ACTIVITIES

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- Hiking
- Accessible Technology
- Karate (Black Belt)
- Investing