

Charmaine Lam

647-974-4753 · c73lam@edu.uwaterloo.ca · linkedin.com/in/lam-charmaine · github.com/c73lam8797

SUMMARY OF QUALIFICATIONS

- Experience with C# and C++ from coursework as well as Python and JavaScript through self-taught knowledge
- Ability to apply problem-solving skills demonstrated through co-leading a BioMechatronics Design Team
- 3+ years of project planning experience from devising numerous biomedical projects and leadership programs

EDUCATION

University of Waterloo

Bachelor of Applied Science Candidate, Honours Biomedical Engineering

Waterloo, ON

September 2019 – Present

SKILLS

Coursework Biomedical Design · Human Factors in Design · Digital Computation · Data Structures & Algorithms
Programming C# · C++ · Python · HTML
Activities Hack the Valley 4 · StarterHacks · DeltaHacks · WISE Design Challenge
Tools GitHub · Visual Studio · Visual Studio Code

WORK EXPERIENCE

University of Waterloo

Research Assistant

Waterloo, ON

September 2019 – January 2020

- Analyzed research data on the primate early visual system to create a cell-population hierarchy in Excel
- Presented connection properties between cortical areas in a graphical mind map using PowerPoint

K&K Dance Dreamz Inc.

Office Administrator

Markham, ON

September 2017 – June 2019

- Ensured comfortable, safe and welcoming environment for students by closely collaborating with parents, teachers, and students, resulting in high customer retention rate and increased profit

PROJECTS

DrugLock

Ongoing

- Engineered a solution using Flask and Python to lower human error during withdrawal of medication in hospitals
- Implemented a facial recognition security feature using OpenCV and dlib
- Currently reimagining the initial project using a Firebase, Express, React, and NodeJS stack

School Task Organizer

Ongoing

- Developing a web-app containing a planner and deadline-tracker using ASP.NET Core Blazor (C#, HTML)
- Implementing ASP.NET MVC Web API to fetch user-data stored in SQL Server

Haptic Gait Feedback, Co-Lead – BioMechatronics Design Team

Ongoing

- Leading a team through a devised Arduino project, purposed to aid gait retraining for users with Parkinson's
- Linked a Wi-Fi module to ThingSpeak IoT, used to ease data collection during testing

MyoSensor Stress Management

February 2020

- Developed a system using React and an EMG sensor with Arduino to provide a tool for stress management
- Created a dynamically updating graph to display users' forearm muscle activation
- Embedded Spotify play button frames to provide destress music recommendations

Oral Care Robotic Arm

December 2019

- Assessed competitor products and investigated user-needs to design and prototype oral-hygiene solutions for users with spinal-cord injury

VOLUNTEERING & LEADERSHIP

Vision Youth Leadership Program

Toronto, ON

Outdoor Leadership Team – Coordinator

September 2018 – Present

- Created a multi-day training schedule and various lesson plans to teach outdoor skills to 50+ people
- Delegated tasks and iterated safety procedures to lead 30+ people through multiple overnight expeditions

AWARDS & ACHIEVEMENTS

Leadership

Duke of Edinburgh Gold · Vision Youth Gold · Excellent Youth Award · Prefect Organization

Other

International Dance Organization 3rd Place · Toastmasters Public Speaking Program