VIVIEN DING

CONTACT

vivien.ding@uwaterloo.ca
519-635-2809
ca.linkedin.com/in/viviending

EDUCATION

University of Waterloo

Systems Design Engineering
(B. ASc.) Expected 2022

AWARDS

- Dean's Honour List
- President's Scholarship of Distinction
- Engineering Faculty Scholarship

SKILLS

Programming:
HTML/CSS, Javascript, Python, C++, MATLAB

Software Tools:
Arduino, Git, Visual Studio

Design Tools:
Adobe Photoshop, Sketch, Invision

Product Management:
Agile/Scrum, User Research, Usability Testing, Documentation

INTERESTS

Engineering Society
Director, Class Representative

Powerlifting
Provincial High School Silver Medal (57kg weight class)

Badminton

Alpine Skiing

Quantum Cryptography

EXPERIENCE

Tulip Retail — Jan 2018 to Apr 2018

Product Management Intern

- Managed products responsible for over **60% of company revenue** for a leading company in the retail technology industry
- Defined product scope, goals, and deliverables in each agile iteration on **VSTS** to ensure consistency with company strategy and commitments.
- Worked with cross-functional teams from planning, requirement gathering, software development, testing, deployment, and performance measurement

Harvard University — May 2017 to Aug 2017

Research Assistant

- Delivered key data and figures to **3+ academic publications** after researching, calculating, and classifying properties of various optical devices
- Optimized designs by automating simulations and measurements with MATLAB and Labview, improving light transmission efficiency of designs by up to **40%**
- Developed flat optical lenses for applications in depth and medical imaging

University of Waterloo — Jul 2016 to Feb 2017

Product Development Intern

- Leveraged **Autodesk Fusion** to design and build 2 functional models of the human vocal tract by applying self-guided research and MRI scans
- Manufactured models using machining, complex molding, and 3-D printing, integrating sound and interactivity with **Arduino (C++)**

University of Waterloo NanoRobotics Group — Sep 2016 to Current

Marketing Team Lead, Treasurer

- Headed team responsible for logistics such as resource acquisition, team recruitment, funding allocation, securing **$4000+ in sponsorships**
- Aided in creation of international award-winning competition robot using knowledge of magnetic actuation, MEMs devices, and lithography

PROJECTS

Haven (QHacks: Best IoT Hack Using a Qualcomm Device)

- IoT-based face recognition platform to control home settings
- Built using OpenFace in Python and Flask for face recognition and API respectively and hosted using Amazon AWS
- Utilises Qualcomm dragonboard for hardware functionality and libraries including OpenCV for image processing

Infinity Clock

- Created colour-changing clock with programmable LEDs on an infinity mirror, utilizing Adafruit Neopixel Library on **Arduino**
- Implemented angle-dependent functionalities using onboard Inertial Monitoring Unit, applying Madgwick's filter algorithm for visualization