

jennifer tsai

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University of Waterloo, B.ASc in Honours Biomedical Engineering & Co-op

September 2020 - May 2025

Intended Specialization in Neural Engineering

experience.

Waterloo Neurotech Student Design Team, Competitor

July 2020 - Present

- Learns and applies signal processing, machine learning, and computational neuroscience methods to design human-centred neurotechnology devices

Futureshot Factory, Innovator & Project Manager

July 2020 - Present

- Collaborates with companies (e.g. IBM, Girl Up, UN Women) to incubate social impact projects that address the United Nations Sustainable Development Goals
- Revamps company website using Figma and WebFlow

HealthTech Connex Inc., Research Assistant

July 2019 - August 2020

- Collected, managed, and analyzed clinical assessment and brain electrophysiological data to investigate the effects of translingual neurostimulation (TLNS) on the cognitive function of people affected by various neurological disorders
- Initiated independent research project under Dr. Ryan D'Arcy before it's further development on the research team at the Centre for Neurology Studies as a full-fledged study

Zoom Engineering Ltd., Work Experience Student

October 2018 - November 2018

- Standardized architectural designs of residential & industrial buildings in preparation for company engineering pipeline
- Assisted in drafting ventilation, lighting, and plumbing system designs using AutoCAD according to the safety standards

leadership.

Open Source Medical Supplies BC, Researcher & Outreach Coordinator

April 2020 - Present

- Researches effective sterilization methods to deactivate the SARS-CoV-2 virus on medical supplies and equipment
- Establishes a network and database of 150+ BC manufacturers for COVID-19 technologies to be produced locally on a large scale

Canadian High Schools Model UN, Director of Logistics

April 2019 - April 2020

- Spearheaded the logistics organization of this internationally renowned conference for 800+ youth to take action on global issues
- Secured \$10k+ in sponsorships, recruited keynote speakers from the U.S. Consulate General and UNHCR, managed conference partner suppliers, and designed conference schedule and delegate social

skills.

Technologies

C++, HTML/CSS, JavaScript, Bootstrap, Git, MATLAB, JMP Stats Analysis.

Engineering

AutoCAD, Inventor, Machine Shop, Soldering, 3D Printing.

Research Certifications

TCPs: CORE Ethics, Good Clinical Practice.

projects.

reflect - a digitally mindful website blocker

November 2019 - Present

- Developed, designed, and marketed the product on the founding team, achieving 500+ users within 3 months of launch

'Tracking cognitive changes in a TLNS treatment program' Study

July 2019 - Present

- Ongoing study and pending publication with HealthTech Connex Inc.

A Review of Current State Neurorehabilitation Technologies

Summer 2019

- Research project for the Surrey Neuroplasticity Clinic to recommend technologies that will expand their existing treatment services

awards.

2020 - BC Provincial Excellence Scholarship
2020 - Jennifer Wadge Social Justice Award
2020 - University of Waterloo President's Scholarship with Distinction
2020 - Service Above Self Youth Finalist

interests.

Neurotech, neurorehabilitation, research software development, product design, reading, running, and the outdoors.