Benedict Leung

My research area is human-computer interaction, focusing on novel interactions with hardware like pen-based devices, eye-tracking, and brain computer interfaces. Recently, my research has been creating interactions with Large Language Models.



Degrees

Computer Science (MSc)

Ontario Tech University

09 / 2023 - 08 / 2025

 Implicit Pen Annotation Assisted by Large Language Models

Computer Science (BSc Hons)

Ontario Tech University

09 / 2017 - 05 / 2022

- Minor in Mathematics
- o Dean's List (Fall 2017)
- o President's List (Fall 2020 Winter 2022)

Experience

Teaching Assistant

Ontario Tech University

09 / 2022 - 05 / 2025

- o Programming Workshop I and II (Fall 2022 & Winter 2023)
- Human Computer Interaction (Fall 2023, 2024)
- o Software Systems Dev. & Integ. (Winter 2024, 2025)

Undergraduate Student Research Fellow

Ontario Tech University - Vialab

09 / 2022 - 08 / 2023

 Engage in research activities under supervision through the Undergraduate Student Research Fellowship (USRF) program.

Undergraduate Student Researcher

Ontario Tech University - Vialab

05 / 2022 - 08 / 2022

 Work on research projects with a supervisor, funded by NSERC USRA

Undergraduate Thesis

Ontario Tech University - Vialab

09 / 2021 - 04 / 2022

- Creating a touch-less camera that uses mental commands and hand gestures to interact with.
- Explores the combination of a brain-computer interface and eye-tracking glasses

Research Assistant

Ontario Tech University 07 / 2021 - 12 / 2021

 Deploy a web-based breadboard circuit-building simulator, designed for learning about digital design.

Honours and Awards

In-Course Scholarship

Ontario Tech University

09 / 2021 - 09 / 2022

 Achieved a GPA of 4.0-4.3 during the previous academic year.

NSERC USRA

Ontario Tech University - Vialab

- Engage in 16 weeks of full-time research activity under supervision.
- Funded by NSERC

Publications

Neel Shah, **Benedict Leung**, Mariana Shimabukuro, Ali Neshati, SwipeSense: Exploring the Feasibility of Back-of-Device Swipe Interaction Using Built-In IMU Sensors. *MobileHCl* 2025.

Benedict Leung, Mariana Shimabukuro, Christopher Collins, GazeQ-GPT: Gaze-Driven Question Generation for Personalized Learning from Short Educational Videos. *Graphics Interface 2025*.

Benedict Leung, Mariana Shimabukuro, Christopher Collins, NeuroSight: Combining Eye-Tracking and Brain-Computer Interfaces for Context-Aware Hand-Free Camera Interaction. *UIST Adjunct 2024*.