

Ruben Tjhie

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Education

- University of Toronto, M.A.Sc. in Industrial Engineering 2025 (exp.)
Co-advised by Drs. Enid Montague & Joe Cafazzo.
- University of Toronto, B.A.Sc. in Computer Engineering 2018

Research Experience

University Health Network

Research Assistant, Centre for Digital Therapeutics (Dr. Quynh Pham) 2024–

- ◆ Conducting a literature review of human factors methods and frameworks for the design of digital therapeutics for older adults from marginalized racial and ethnic groups.

University of Toronto

Research Assistant,

Wellness & Health Enhancement Engineering Lab (Dr. Enid Montague) 2023–

- ◆ Collaborating with Dr. Joe Cafazzo's team at Healthcare Human Factors.
- ◆ Examining equity in the practice of usability evaluation of health technologies by engaging with usability practitioners using focus groups, interviews, and qualitative surveys.
- ◆ Assisting in designing usability studies, including developing protocols, study materials, and managing ethics review.

Grants & Awards

Digital Research Alliance of Canada

Promoting open science in human factors engineering with researchers from equity-seeking groups. Sep. 2024–Mar. 2025. \$32,000.

TRANSFORM HF

Student Collaborator. Establishing equitable human factors design methods to improve digital therapeutics for heart failure management. 2024–2025. \$9,700. (PI: Quynh Pham)

Tjhie, D.R.

Conference Papers

D. Ruben Tjhie, Enid Montague, and Joseph A. Cafazzo. 2024. Using a Critical FMEA Approach to Identify Equity-Related Failures in Usability Evaluations of Health Technologies. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. <https://doi.org/10.1177/10711813241260389>

Oral Presentations

Using a Critical FMEA Approach to Identify Equity-Related Failures in Usability Evaluations of Health Technologies

- ◆ Transform HF Fall Network Event, Toronto, Canada. (Nov. 8, 2024)
- ◆ Inter-University Workshop, University at Buffalo, Buffalo, NY, USA. (Oct. 15, 2024)
- ◆ ASPIRE—International Annual Meeting of the Human Factors and Ergonomics Society, Phoenix, AZ, USA. (Sep. 10, 2024)

Contextual Integrity in Remote Patient Monitoring Systems

- ◆ Symposium on Applications of Contextual Integrity, Rutgers University, New Brunswick, NJ, USA. (Sep. 27, 2024)

Teaching Experience

University of Toronto

Teaching Assistant

- ◆ MIE240 Human-Centred Systems Design (Winter 2024, Winter 2025)
- ◆ MIE1401 Introduction to Human Factors Engineering (Fall 2024)
- ◆ MIE509 AI for Social Good (Fall 2024)
- ◆ MIE354 Business Process Engineering (Fall 2023)

Guest Lectures

- ◆ APS111 Introduction to Human Factors Engineering (Nov. 13, 2024)
- ◆ MIE1401 Methods in Prototyping and Usability Evaluation (Oct. 26, 2024)

University Service

Human Factors Interest Group

Secretary-Treasurer

2024–

HFES Student Chapter at the University of Toronto that promotes the disciplines of human factors & ergonomics through events and programming.

Tjhie, D.R.

Community Service

Gradient Spaces

Founding Board Member 2020–2024

Launched a new not-for-profit organization to support early 2SLGBTQ+ entrepreneurs through programming developed in partnership with the Toronto start-up ecosystem. Gradient Spaces was acquired by QueerTech in 2024.

Venture Out

Chair (and several other preceding roles) 2017–2020

Hosted in-person and virtual events for 2SLGBTQ+ technology professionals to learn, connect, and celebrate. Venture Out is a part of Start Proud, a not-for-profit focused on the professional development of queer students and professionals.

Professional Service

International Symposium on Human Factors and Ergonomics in Health Care

Reviewer, Digital Health Track 2025

Industry Experience

Shopify

Privacy Engineer 2021–2023

League

Software Engineer 2019–2021

AMD

Silicon Engineer 2018–2019

Intern 2016–2017

Certifications

International Association of Privacy Professionals

Certified Information Privacy Technologist 2022–

Other Specialized Training (in-progress)

Collaborative Centre for Climate, Health & Sustainable Care

Climate, Health, and Sustainable Care [Student Training Program](#) 2024–2025

OLS

[Open Seeds](#) (Open Science Training) 2024–2025

Tjhie, D.R.

Professional Affiliations

Human Factors and Ergonomics Society (HFES)

International Association of Privacy Professionals (IAPP)

ACM

IEEE