

ALEXANDRE ROBERGE-MILANESE

Interested in developing technology that helps people.

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WORK EXPERIENCE

Augmented Intelligent Comms/Wearable Speech

Inclusive Media And Design Centre

Sept 2020 – Present

Toronto, Ontario

- Collaborated with academics and developers to **conceive** an interface that is mobile and customizable for users with acquired speech and mobility limitations.
- Planned for implementation of location and context aware speech assistance as well as predictive text using GPT-2.
- Co-developed Augmented Intelligent Comms using **ReactJS**, **Django** and **Agile methodologies**.

AAC

Platform-independent

Ease of Use

Customizable

MyHealthMyRecord

Inclusive Media And Design Centre

May 2020 – Sept 2020

Toronto, Ontario

- Planned** a redesign of the MyHealthMyRecord platform (a video journaling platform that assists people in recording their experiences with chronic health conditions) and **created** and **presented** several system architecture models to an interdisciplinary team of academics and developers.
- Developed** a Web dashboard that takes patient's videos detailing their experiences with **chronic health conditions** and generates a transcript. **Sentiment analysis** is then performed on the transcript using IBM Watson and generates a series of **graphs**(Plotly) detailing the **range of emotions** in each video.
- Worked towards a platform independent telehealth system by **designing** and **implementing** Firebase login, permission management, and storing video metadata(Cloud Firestore) in **Android**.

Telehealth

Video Journaling

Machine Learning

Android

Webmoti

Inclusive Media And Design Centre

Feb 2019 – May 2020

Toronto, Ontario

- Researched** accessible design principles and **developed** a customizable responsive user interface design to reduce cognitive load for neurodiverse users.
- Led** Peer-to-Peer **WebRTC** based video telepresence **backend** development, directly leveraging the Javascript API. Implemented the WebRTC signaling server using Cloud Firestore. Setup and configured TURN, STUN, Web servers.

Developer/IT Specialist

Altomedia Inc.

May 2012 – Jan 2020

Brampton, Ontario

- Performed a multitude of Development/IT functions for a French publishing company including creating and managing their online presence and IT infrastructure.
- Created, coordinated a semi-automated social media campaign to promote the website on Google organic search and increase user engagement on Facebook, Twitter social media platforms.

EDUCATION

BSc (Honours), Computer Science

Ryerson University

2016 – 2021

Toronto, Ontario

Extracurriculars: Game Makers Union, Competitive Programming Club

RESEARCH



Co-Authored WebMoti

Asmy F.S., Roberge-Milane A., Rombaut M.C., Smith G., Fels D.I. (2020)

WebMoti, Computers Helping People with Special Needs. ICCHP 2020.

Lecture Notes in Computer Science, vol 12377. Springer, Cham. [Link](#)

Telepresence

Assistive Technology



Ryerson CareerBoost Collaboration Award

This **award** recognizes an individual who has made an impact in fostering a collegial environment, using exceptional interpersonal skills to proactively seek out collaborative ways to work with colleagues in their department and / or across the community (Ryerson and beyond).

Collaboration

Communication Skills



Conferences and Presentations

- Presented Webmoti at the **Discovery Conference** by Ontario Centres for Excellence (Toronto, 2019).
- Presented to Minister Morneau and Minister Duncan at Ryerson's Celebrate Canada's Accomplishments in Science and Research (Toronto, 2019).
- Presented at the Independent Living Canada's **AccessAble** Technology Expo (Ottawa, 2019).

SKILLS

Soft Skills

- Strong oral and written communication skills in both English and French.
- Ability to think outside the 'box'.

Hard Skills

- Proficient in Python, Java, JavaScript, C, Shell scripting, GIT, Full Stack Web Development, Android Development, Arduino.
- Strong problem solving skills.

LANGUAGES

English

Native Proficiency

French

Native Proficiency