

Mitacs Globalink Research Internship Final Report

The Role of Emotion, User Experience and Persuasive Design Play in the Effectiveness of Contact Tracing Apps

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Prepare for Mitacs

Before participating in this Mitacs GRI program, I didn't have much international experience. For me, it was a steppingstone into the global stage. I am truly grateful to Professor Plinio Morita and Thokozani Phiri for accepting me, giving me the opportunity to intern in Canada and learn about everything around the University of Waterloo. This experience allowed me to gain a deeper understanding of the Canadian environment through the internship and rejuvenate myself through travel during holidays.








In Taiwan, both work and study are highly stressful. From elementary school to university, I never really had the time to reflect on questions like, "What can I do? What do I love to do?" It wasn't until I entered university that I began to realize how important I am and that everything I do affects my emotions. During university, I chose to change my major and explore myself through interdisciplinary studies, learning knowledge I had previously been afraid to pursue. This was so that I could achieve a higher level of cognitive complexity, gain more sensitivity to technology, and stimulate more creativity.

This also served as my preparation for participating in this program. I am eager to break away from the traditional Wet Lab environment, spark more creativity, and connect with people to better understand the world through personal interactions.

Work I do

In the lab, I primarily collaborated with Pedro, who was working on dynamic informed consent for public health research. His focus was on designing questionnaires and conducting interviews, while my role was to analyze the questionnaire data. However, this aspect of the internship left me somewhat puzzled. Many of my colleagues were highly passionate about coding and had strong programming skills. Having done a few small programming projects in the past, I was initially excited about the possibility of diving into more programming tasks. Instead, I was assigned to work on statistical analysis, which, while one of my stronger subjects, left me concerned about the sample size for the survey research. This is something I found a bit disappointing during the internship. If possible, I would have liked to dedicate more eCort toward influencing the sample size to ensure the research had statistically significant and representative results.

We used Qualtrics for survey collection, and I was impressed by the platform's comprehensive and flexible survey system. Compared to commonly used tools in Taiwan, such as Google Forms, MS365 Forms, and Surveycake, Qualtrics offers much greater flexibility. After returning to Taiwan, I plan to delve deeper into Qualtrics and explore how I can apply its features from various perspectives in future projects.

Project name ↓	Status	Responses	Type
 Post-Study System Usability Questionnaire (PS...	Active	6	Survey
 Net Promoter Score (NPS) Survey for Consentio	Active	5	Survey
 Internet Skills Scale (ISS)	Active	7	Survey
 Informed Consent Form for Usability Testing Par...	Active	8	Survey
 Demographic Survey for Usability Testing Study	Active	5	Survey
 Customer Satisfaction Questionnaire	Active	6	Survey
 CUSE Questionnaire	Active	6	Survey

In addition to collaborating with Pedro, I also assisted Arlene with preprocessing data on Canadian provinces and cities. I used Excel formulas to speed up the data preprocessing. However, there were some challenges, possibly due to using a Mac computer or issues with Chinese encoding, where certain text couldn't be reverse-engineered to extract the information. This was an unfortunate limitation during the process and something I found disappointing.

Skill I Learned

- I Project Management
- I Work Life Balance
- I Data Analytics
- I Statistical Skill improvement
- I Independent living In foreign country

Intern experience feedback

During this internship, I really enjoyed the environment at Ubilab. Even though I was only an undergraduate research assistant, I could feel that everyone was incredibly friendly. This made me strongly desire to pursue further studies in Canada. Although I didn't accomplish a lot in terms of work during the internship, I spent a lot of time observing and soaking in my surroundings. I believe this is a sign of my growing adaptability, which will help me prepare for future studies abroad.

The Lab's atmosphere was peaceful, except for its distance from the main campus. Every time I walked into the Lab, I enjoyed seeing a group of elderly people chatting, cooking, or visiting the nearby bank and gym. It gave me the sense that this was not just a place for work, but also a community and a great place to live. In Taiwan, the concept of a Lab is often just a small room inside a tall building, whereas in Canada, with its vast land, the buildings aren't as tall, and this seems to reduce the pressure of daily lab life.

Cultural experience feedback

In terms of cultural experiences, Canada shares some similarities with Taiwan, as both are immigrant societies. However, while Taiwan's immigrant population is largely from Southeast Asian countries, Canada is home to a broader mix of ethnic groups, including Indians, Chinese, and various other ethnicities. In this immigrant-rich country, I found that Canada has a more stable society compared to Taiwan and faces fewer issues with racial discrimination. Although some individuals on the streets might still exhibit discriminatory behavior, these are isolated and rare cases.

During this internship, I visited several national parks, including Point Pelee National Park, Bruce Peninsula National Park, and Morris National Park, as well as Niagara Falls, Kingston, Quebec, Montreal, the Thousand Islands, and the Toronto Islands. While I didn't get a chance to visit the Maritimes, Vancouver, Calgary, Edmonton, or Winnipeg, I was still able to experience the diverse customs and cultures of Eastern Canada. The distinct atmosphere of two different provinces and the various tourist destinations each with their own unique facilities left a strong impression on me.

Personally, I really enjoyed the overall vibe in Canada. Although I didn't make it to Buffalo, New York, or Windsor, I plan to seize the opportunity to explore those border cities if I return to Canada for further studies. I also hope to take this chance to travel extensively across the U.S. as well.

Live experience feedback

During my three-month internship, I lived in two different places: Sage 1 Apartment in Waterloo and a house unit (#2) in Kitchener. The two living environments were quite different. The apartment felt safer, had management services, and trash disposal was handled by the building. In contrast, living in the house required me to take care of all the household chores, which was a new and interesting experience for me. One thing that particularly stood out was the efficient garbage disposal system in Canada—unlike in Taiwan, where you have to chase the garbage truck to throw away trash, in Canada, you can leave it on the street for collection. This was a small but memorable difference for me.

Aside from the widespread presence of cannabis, I found everything else in Canada to be wonderful. After returning to Taiwan, I might consider doing some comparative research on Canada's cannabis policies. If these policies can be effectively implemented, I believe they could serve as a good model, especially since there are already discussions in Taiwan advocating for the legalization and decriminalization of cannabis. Understanding how a country evolves after lifting cannabis bans is a thought-provoking topic worth exploring.

My experience at the University of Waterloo gave me the sense that the city, much like my home university, National Cheng Kung University (NCKU), revolves around the university itself. The unique local culture and the way the university enhances the city—and vice versa—create an environment where people want to settle, rather than move to a bigger city like Toronto. I find this similar to my decision to choose NCKU over Taiwan's top university, National Taiwan University (NTU). Both decisions reflect the importance of finding a place where the university shapes and is shaped by the surrounding city.

Special Thanks

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