Sabrina Lakhdhir

587-892-6600 — sabrinalakhdhir@uvic.ca — Portfolio — LinkedIn

Research Interests — Wearables, Customization, Social Acceptability, Digital Fabrication, Creativity Support Tools, HCI.

Education

Doctor of Philosophy in Computer Science **Expected 2027**
University of Victoria

Master of Science in Computer Science **Transferred to PhD**
University of Victoria

Bachelor of Science, Honours, Computer Science **June 2021**
University of Calgary
Minor: Visual Art and Art History
Concentration: Human Computer Interaction

Research and Professional Experience

Research Associate **September 2021 – Present**
VIXI Lab, University of Victoria *Victoria, British Columbia*
Related Publications: UR1, C5, C4, C3, J7, C2, J6, J5, J4, J3
- Led research projects to understand how we might empower and engage end-users in designing personalized devices.
- Performed qualitative analysis to understand users, and iterative prototyping to develop interactive systems and artifacts.
- Emphasized focus on user-centered research and design; the social impacts and acceptability of advancing technologies.
- Engaged with fabrication technologies: 3D printing, material explorations, laser cutting, sewing, Arduino, e-textile sensors and actuators.

Human Factors Research Intern **April 2024 – December 2024, May 2025 - August 2025**
Home, Beats, and Ecosystem, Apple *Los Angeles, California*
- Designed and conducted small- and large-scale (n=20-100) user studies to understand product fit, packaging, UI and UX; to make design recommendations for future products; and to collect product usage and sensor data. Studies utilized in-house developed testing tools, and employed varied methodologies to capture audio, visual, and textual data.
- Collected, organized, and analyzed qualitative and large-scale quantitative data related to user perception and anthropometric fit using Python scripts, built-in tools on spreadsheet applications, and thematic analysis.
- Wrote program-specific scripts for data collection, analysis, and task automation within third-party visualization softwares for efficient performance of repetitive tasks during visual analysis.
- Worked with various technologies: 3D scanning, 3D modelling, mixed material 3D printing, 3D visualization, Arduino.

Research Associate **October 2020 – September 2021**
Multilingual Families Lab, University of Edmonton *Edmonton, Alberta*
Related Publications: J2
- Collaborated with an interdisciplinary team to iteratively develop an application (HTML, JS, CSS) to support communication amongst families, therapists, and educators who face challenges due to language barriers.

Research Associate **September 2020 – August 2021**
iLab, University of Calgary *Calgary, Alberta*
Related Publications: C1
- Conducted a design study to understand possible ideas of wearables to aid autonomous vehicle-pedestrian interactions.
- Ideated and prototyped a series of functional, soft-wearable prototypes that integrated e-textile sensors and actuators.

Summer Research Intern **May 2019 – August 2019**
Calgary Pediatric Brain-Computer Interface Program, University of Calgary & Alberta Children's Hospital *Calgary, Alberta*
Related Publications: J1
- Developed an interactive system (Unity, C#) using data collected by a transcranial magnetic stimulation robot to support remote training for healthcare staff.

Academic Teaching

Teaching Assistant
University of Victoria

SENG 310 *(Human Computer Interaction)*	Fall 2021, Summer 2022, Spring 2024, Spring 2025, Spring 2026
CSC 586B *(Designing Collaborative Technologies)*	Spring 2024
CSC 485C/578C *(Computing for Cognitive Augmentation)*	Fall 2022
CSC 106 *(The Practice of Computer Science)*	Spring 2022

Guest Lectures and Invited Talks

GlucoMaker, *Health Technology Showcase, University of Victoria*	November 2025
Graduate Student Life in Victoria, *CSC 595, University of Victoria*	November 2025
Introduction to Prototyping: What, Why, and How, *UVic WEST x UVic Robotics*	October 2025
Designing Tools to Support the Customization of Wearables, *Autodesk Research, MaRS Toronto*	February 2023
Hour of Code, *CSC 106, University of Victoria*	November 2022
Creativity and Cognition, *CSC 485C/578C, University of Victoria*	November 2022
Customization of Personal Wearables, *SENG 310, University of Victoria*	July 2022
The Intersection of Art and Technology, *CSC 106, University of Victoria*	March 2022

Mentorship

Undergraduate Research Assistant - Charlotte Jacques, *University of Victoria*	January 2025 – August 2025
Undergraduate MITACS Intern - Oishwarjya Banerjee, *University of Victoria*	July – October 2022
Undergraduate Honours Student - Vincent Potrykus, *University of Victoria*	January – April 2022

Publications

Conference Proceedings

C5 Sowmya Somanath, Molly Stewart, **Sabrina Lakhdhir**, Phaedra Berger, and Regan L. Mandryk. 2026. Understanding How Creativity Support Tools Can Foster Happiness. In Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26). Association for Computing Machinery, New York, NY, USA, Article 1004, 1–22. https://doi-org/10.1145/3772318.3790898

C4 **Sabrina Lakhdhir**, Charles Perin, and Sowmya Somanath. 2024. *Expressive Clothing: Understanding Hobbyist-Sewers' Visions for Self-Expression Through Clothing.* In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24). Association for Computing Machinery, New York, NY, USA, Article 858, 1–17. https://doi.org/10.1145/3613904.3642338

C3 **Sabrina Lakhdhir**, Chehak Nayar, Fraser Anderson, Helene Fournier, Liisa Holsti, Irina Kondratova, Charles Perin, and Sowmya Somanath. 2024. *GlucoMaker: Enabling Collaborative Customization of Glucose Monitors.* In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24). Association for Computing Machinery, New York, NY, USA, Article 127, 1–21. https://doi.org/10.1145/3613904.3642435

C2 **Sabrina Lakhdhir**. 2024. *Creating Positive Social Experiences Through the Design of Custom Wearables.* In Extended Abstracts of the 2024 CHI Conference on Human Factors in Computing Systems (CHI EA '24). Association for Computing Machinery, New York, NY, USA, Article 428, 1–7. https://doi.org/10.1145/3613905.3638190

C1 **Sabrina Lakhdhir**, Sowmya Somanath, and Ehud Sharlin. 2023. *Wearing Awareness: Designing Pedestrian-Wearables for Interactions with Autonomous Vehicles.* In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). Association for Computing Machinery, New York, NY, USA, Article 316, 1–8. https://doi.org/10.1145/3544549.3585655

Under Review

UR2 Charlotte Jacques, **Sabrina Lakhdhir**, Elizabeth Reid, Anthony Estey, Regan Mandryk, Sowmya Somanath. *Gratitude Buddy: Design and Evaluation of Scaffolding Supports for a Mobile Gratitude Application.* Submitted to GI '26.

UR1 **Sabrina Lakhdhir**, Helene Fournier, Fraser Anderson, Liisa Holsti, Irina Kondratova, Charles Perin, and Sowmya Somanath. *Evaluating GlucoMaker: A Tool for Co-Designing Bespoke Glucose Monitors.* In progress, to be submitted to JMIR Formative Research.

Juried

J8 **Sabrina Lakhdhir**, Sowmya Somanath. *Towards a Framework for Designing Socially Acceptable Wearables for Well-being.* Everyday Wearables for Personalized Health and Well-being Workshop at CHI '26.

J7 **Sabrina Lakhdhir**, Sowmya Somanath. *Characteristics of Socially Acceptable Healthcare Devices.* HCI & Health Workshop at CHI '25.

J6 **Sabrina Lakhdhir**, Charles Perin, and Sowmya Somanath. *Envisioning Tools to Support Creating Information-Communicating Garments.* Poster Presentation at Graphics Interface (GI '23).

J5 **Sabrina Lakhdhir**, Liisa Holsti, Helene Fournier, Irina Kondratova, Fraser Anderson, Charles Perin, and Sowmya Somanath. *Engaging Diverse Individuals in Remote Co-Design to Collaboratively Design Personalized Glucose Monitors.* A Workshop on Disability Inclusive Remote Co-Design at ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '22).

J4 **Sabrina Lakhdhir**, Helene Fournier, Irina Kondratova, Fraser Anderson and Sowmya Somanath. *Tools for Collaboratively Designing and Evaluating Personalized Assistive Technologies.* Poster presented at Celebrating the Success of Women in STEM Symposium: Pushing the frontiers of research through collaboration. (Feb. 2022); virtual.

J3 **Sabrina Lakhdhir** and Sowmya Somanath. *Envisioning a Toolkit for Storytelling with Garments.* Toolkits & Wearables Workshop at CHI Conference on Human Factors in Computing Systems (CHI '22).

J2 Catrine Demers, **Sabrina Lakhdhir**, Skanda Kaushik, Zhanika Gimeno, Drishti Munjal, Lucy Yang, Rigel Tormon, Whitney Ebose, and Andrea AN MacLeod. *linGrow: Development of a multilingual app to support home-school communication of multilingual families.* (2021).

J1 **Sabrina Lakhdhir**, Adam Kirton, Ephrem Zewdie. *A Virtual Trainer for Transcranial Magnetic Stimulation*. Poster at Alberta Children's Hospital Research Institute Summer Student Research Symposium (ACHRI 2019).

Academic Service

Student Volunteer Co-Chair — **Graphics Interface 2023**
Accessibility Co-Chair — **Designing Interactive Systems 2022**

Program Committee	GI '23, GI '24, GI '26, CHIWORK '26
Associate Chair	CHI '26 Poster Track
Student Volunteer	CHI '23
Reviewer	CHI '22*, TEI WIP '23, CHI '23, CHI LBW '23, C&C Pictorial '23, DIS '23, INTERACT Short Papers '23, GI '23, UIST '23, TEI '24, TEI Pictorials '24, GI '24, TEI Papers '25, TEI Pictorials '25, TEI WIP '25, CHI '25*, CHI '26*, CHI '26 Posters, CHIWORK '26, GI '26

** Special Recognition*

Scholarships, Honours, and Awards

Robert W. Ford, Donald Wagg, & Alexander and Helen Stafford MacCarthy Muir Graduate Scholarships	December 2025
President's Research Scholarship	May 2026, May 2025, May 2024, May 2023
University of Victoria Graduate Award	July 2025, July 2024, July 2023, April 2023, April 2022
ACM Doctoral Consortium Award	May 2024
CUPE 4163 Conference Award Fund	April 2026, May 2025, May 2024, April 2023
NSERC Post Graduate Scholarship – Doctoral	May 2023
Faculty of Graduate Studies International Travel Grant	April 2023, October 2022
Stantec Equity, Diversity, & Inclusion Scholarship	December 2022
British Columbia Graduate Scholarship	September 2022
Gary Marsden Travel Award	May 2022
University of Victoria Graduate Fellowship Award	September 2021

Professional Memberships

ACM SIGCHI Member
Association of Computing Machinery (ACM) Student Member

Skills

Programming	Python, Java, C# (Unity), HTML, CSS, JS, Swift, Arduino
Tools	Visual Studio Code, PyCharm, Processing, Tableau, Git, Microsoft Office, JMP
Design	Graphic design (Adobe Photoshop, Illustrator), UI/UX prototyping (InVision, Adobe XD)
Digital Fabrication	3D modelling (Tinkercad, Paraview, Meshlab), 3D printing, 3D scanning (Artec), graphic development, laser cutting (Lightburn), e-textiles (Arduino, Adafruit, Lilypad)
Qualitative Research	Thematic analysis, grounded theory
Research Methods	Interviews, Diary Studies, Focus Groups, Design Probes