Fateme Rajabiyazdi
Carleton University
Faculty of Engineering and Design
Department of Systems and Computer Engineering
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Work Experience

Assistant Professor - Carleton University, Canada Jan 2021–present
Department of Systems and Computer Engineering
Cross-Appointed School of Information Technology

Affiliate Investigator - Bruyère, Canada Jun 2023–present
Bruyère Research Institute

Postdoctoral Fellow - McGill University, Canada Jan 2019–Dec 2020
Supervisor: Dr. Julio Fiore, *Project Leaders:* Dr. Liane Feldman and Dr. Nancy Mayo

Data Visualization Researcher - Alberta Innovates - W21C, Canada Sep 2015–Oct 2018
Project Leader: Dr. William Ghali

Education

PhD of Computer Science - Information Visualization - University of Calgary 2014–2018
Thesis: Exploring the Design of Visualizations to Facilitate Patient-Provider Communication
**Awards:* Nominated for Bill Buxton Dissertation Award and the IEEE VGTC VPG Doctoral Dissertation Award
Supervisors: Dr. Sheelagh Carpendale and Dr. Lora Oehlberg

Master of Computing - HCI - Australian National University 2010–2012
Thesis: Design and Development of Interfaces for Different Tablet Sizes
Supervisors: Dr. Tom Gedeon and Dr. Duncan Stevenson

Bachelor of Software Engineering - University of Tehran 2006–2010

Grants Total ($1.66M CAD)

Principal Investigator (Total: $927.952 CAD)

G11. **Canada Foundation for Innovation - John R. Evans Leaders Fund (CFI-JELF)** 2023-2025
Clinical Decision-Making on Large High-Resolution Displays (LHRDs)
Role: Principal Investigator, Granted: $217,302 CAD

G10. **Collaborate 2 Commercialize (C2C) - Ontario Centre of Innovation (OCI)** 2023-2024
Intelligent Insights – Patient Transfers
Role: Principal Investigator, Granted: $300,000 CAD

G9. **Multidisciplinary Research Catalyst Fund (MRCF)** 2022-2024
Canadian Futuristic Health Data Visualization Center
Role: Principal Investigator, Granted: $50,000 CAD

G8. **National Research Council (NRC) Aging in Place Challenge** 2022-2025
Evaluation and Adaptation of Assistive Technologies for Older Adults
Role: Principal Investigator (Academic), NRC PI: Dr. Hélène Fournier, Granted: $90,000 CAD

G7. **Natural Sciences and Engineering Research Council of Canada (NSERC) Alliance - Ontario Centre of Innovation (OCI) Voucher for Innovation and Productivity (VIP)** 2022-2023
Qualitative Data Visualization Dashboard
Industry Partner: NovaceneAI
Role: Principal Investigator, Granted: $60,000 CAD

G6. **Carleton University Experiential Learning Fund** 2022-2023
EXPeriential-learning for ANalyzing Data (EXPAND) Program
Role: Principal-Investigator, Granted: $6,000 CAD

G5. **Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant** 2021-2026
Exploring the Design and Development of Patient Data Visualizations on Shared Displays
Role: Principal Investigator, Granted: $132,500 CAD

G4. **Carleton Faculty of Engineering and Design** 2021
Multitaction table display
Role: Principal Investigator, Granted: $50,000 CAD

G3. **Scholarship of Teaching and Learning (SoTL)** 2021-2022
Critical Reflections on Teaching Data Visualizations to Students with Engineering Backgrounds
Role: Principal Investigator, Granted: $5,000 CAD

G2. **Carleton University I-CUREUS Grant** 2021-2024
Winter 2024, Fall 2023, Fall 2022, Winter 2022, Fall 2021, Summer 2021
Role: Principal Investigator, Granted: $11,250 CAD

G1. **Career Ready Technation Canada** 2021
Design and Development of a Wearable Pain Tracker
Role: Principal Investigator, Granted: $5,900 CAD

Co-Principal Investigator (Total: $733.438 CAD)

Bruyere Foundation 2023
Electronic Memory Support System: An Innovative Digital Calendar for Older Adults with Mild cognitive impairment
Role: Co-PI with Dr. Neil Thomas (PI, Bruyere Research) Granted: $19,288 CAD

Carleton University Research Development Grants NSERC Early Career Researcher 2023
Data-Physicalization for Youth Mental Health: A Human-Centered Approach
Role: Co-PI with Dr. Juan Garcia (Carleton University, School of Industrial Design) Granted: $10,000 CAD

SIGCHI Development Fund 2023
Graphics Interface (GI'23) Early Career Researcher Mentorship and Panel
Role: Co-PI with Dr. Sowmya Somanath (University of Victoria) Granted: $3,500 USD

Multidisciplinary Research Catalyst Fund (MRCF) 2022
Socially-inclusive Extended Reality (XR) Systems for Multi-User Collaboration and Communication
Role: Co-PI with Dr. Robert Teather (Carleton University) Granted: $50,000 CAD

Canadian Institutes of Health Research (CIHR) Project Grant - Fall 2021 and Spring 2022 2022
The OPERa Study: A Multicenter Observational Prospective Cohort Study to Evaluate Determinants of Long-Term Quality of Life following Restorative Proctectomy for Rectal Cancer Treatment
Role: Co-PI with Dr. Marylise Boutros (McGill University - Jewish General Hospital) Granted: $558,450 CAD

American Society of Colorectal Surgeons 2022
Consensus Development on the Definition, Grading and Reporting of Colorectal Anastomotic Leak
Role: Co-PI, PI: Dr. Patricia Sylla (Icahn School of Medicine at Mount Sinai) Granted: $67,500 USD

Collaborator

Canadian Institutes of Health Research (CIHR) Planning and Dissemination Grant 2019
Transforming Post-Fracture Acute Pain Management in Older Men/Women through mHealth Application
Role: Collaborator, PI: Dr. Suzanne Morin (McGill University Health Center)

Canadian Institutes of Health Research (CIHR) Project Grant - Fall 2019 2019
Opioid versus Opioid-Free Analgesia After Surgical Discharge: A Systematic Review and Meta-Analysis
Role: Collaborator, PI: Dr. Julio Fiore (McGill University Health Center)

Applied as Principal Investigator - Not Granted

New Frontiers in Research Fund (NFRF) Exploration 2023
Digital Storytelling for Patient with Dementia
Role: Principal Investigator, Total request: $250,000 CAD

Google Award for Inclusion Research 2023
Developing an Interactive Data Visualization System Representing Recovery Progress after a Stroke for Patients with Cognitive Impairment and/or Aphasia
Role: Principal Investigator, Total request: $60,000 USD

New Frontiers in Research Fund (NFRF) Exploration 2022
Data-Centric Technological Solutions to Empower Patient-Clinical Team Interaction
Role: Principal Investigator, Total request: $250,000 CAD

Natural Sciences & Engineering Research Council of Canada (NSERC) Research Tools & Instruments 2022
Multitouch Displays to Collaboratively Interact with Health Data
Role: Principal Investigator, Total request: $140,000 CAD

National Research Council (NRC) Aging in Place Challenge 2021
Development of Mobile Health Applications and Visualizations for Monitoring and Communicating Mental Health
Role: Principal Investigator (Academic), NRC PI: Dr. Hélène Fournier, Total request: $492,400 CAD

Awards and Scholarships

Early Career Researcher Award, Canadian Medical and Biological Engineering Society (CMBES) 2023

Outstanding Publication Committee Award, IEEE Ottawa Section 2022

Individual Service Excellence Award Nomination, Carleton University 2022

Co-op Employer of the Year Nomination, Carleton University 2021

Postdoctoral Scholarship, Fonds de Recherche du Québec – Santé (FRQS), $45,000 CAD 2020-2021

W21C Health Services Research Scholarship, Alberta Health Services, $60,000 CAD 2015-2017

Computer Science Department Research Award, University of Calgary, $8,000 CAD 2016-2017

Computer Science Department Research Award, University of Calgary, $10,000 CAD 2014-2016

Publications

* indicates HQP under my supervision.

Book Chapters (B)

B1. Julio F Fiore Jr., **Fateme Rajabiyazdi**, and Liane S Feldman. (2022). Developing Patient-Centered Outcomes Metrics for Abdominal Surgery. *The SAGES Manual of Quality, Outcomes and Patient Safety*, 259-276, https://doi.org/10.1007/978-3-030-94610-4-14.

Peer Reviewed Journal Publications (J)

J16. Vincent Brissette, Nasra Al Busaidi, Olivia Monton, Jenny Moon, Marie Demian, Carol-Ann Vasilevsky, Sarah Faris, **Fateme Rajabiyazdi**[1], Marylise Boutros[1]. (2024) Exploring Patients' Needs and Expectations for Information on Sexual Dysfunction After Rectal Cancer Treatment: A Qualitative Study. *Colorectal Disease* (Accepted) ([1]Shared senior investigator role)

J15. Benjamin Bach, Mandy Keck, **Fateme Rajabiyazdi**[2], Tatiana Losev, Isabel Meirelles, Jason Dykes, Robert S. Laramee, Mashael AlKadi, Christina Stoiber, Samuel Huron, Charles Perin, Luiz Morais, Wolfgang Aigner, Doris Kosminsky, Magdalena Boucher, Søren Knudsen, Areti Manataki, Jan Aerts, Uta Hinrichs, Jonathan C Roberts, Sheelagh Carpendale. (2023) Challenges and Opportunities in Data Visualization Education: A Call to Action. *IEEE Transactions on Visualization and Computer Graphics*. https://doi.org/10.1109/TVCG.2023.332737 ([2]Author list is based on contributions)

J14. Olivia Monton, Allister Smith, Jeongyoon Moon, Marie Demian, Richard Garfinkle, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2023) An Online Educational and Supportive Care Application for Rectal Cancer Survivors with Low Anterior Resection Syndrome: A Mixed Methods Pilot Study. *Colorectal Disease* 00: 1–9. https://doi.org/10.1111/codi.16665

J13. Makena Pook, Tahereh Najafi, Maxime Lapointe-Gagner, Philip Nguyen-Powanda, Hiba Elhaj, **Fateme Rajabiyazdi**, Pepa Kaneva, Lawrence Lee, Liane S. Feldman and Julio F Fiore Jr. (2023) Patients' Experiences Undergoing Cancer Surgery During the COVID-19 Pandemic: A Qualitative Study. *Support Care Cancer* 31, 400. https://doi.org/10.1007/s00520-023-07861-w

J12. Natasha Caminsky, Jeongyoon Moon, et al, **Fateme Rajabiyazdi**, and Marylise Boutros. (2023) Patient and Surgeon Preferences for Early Ileostomy Closure Following Restorative Proctectomy for Rectal Cancer – Why Aren't We Doing It? *Surgical Endoscopy*, 37, 669–682, https://doi.org/10.1007/s00464-022-09580-5.

J11. Kevin Tran-Nguyen, Caroline Berger, Roxanne Bennett, Michelle Wall, Suzanne Morin, and **Fateme Rajabiyazdi**. (2022). Mobile App Prototype in Older Adults for Postfracture Acute Pain Management: User-Centered Design Approach. *Journal of Medical Internet Research Aging*, 5(4):e37772, https://doi.org/10.2196/37772.

J10. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Marie-Josée Brouillette, Lesley K. Fellows, Bärbel Knäuper and Nancy E. Mayo. (2022). Effectiveness of a Personalized Health Profile on Specificity of Self-Management Goals Among People Living with HIV in Canada Findings from a Blinded Pragmatic Randomized Controlled Trial. *Quality of Life Research*, https://doi.org/10.1007/s11136-022-03245-5.

J9. Uyen Do, Makena Pook, Tahereh Najafi, **Fateme Rajabiyazdi**, et al. (2022). Opioid-free Analgesia after Outpatient General Surgery: A Qualitative Study Focused on the Perspectives of Patients and Clinicians Involved in a Pilot Trial. *Surgical Endoscopy*, 1-12, https://doi.org/10.1007/s00464-022-09472-8.

J8. Uyen Do, Charbel El-Kefraoui, et al., **Fateme Rajabiyazdi**, Nadia Safa, Nawar Touma, Francine Tremblay. (2022). Feasibility of Prospectively Comparing Opioid Analgesia With Opioid-Free Analgesia After Outpatient General Surgery: A Pilot Randomized Clinical Trial. JAMA Netw Open, 5(7):e2221430, https://doi.org/10.1001/jamanetworkopen.2022.21430.

J7. Julio F Fiore Jr., Charbel El-Kefraoui, Marc-Aurele Chay, Philip Nguyen-Powanda, Uyen Do, Ghadeer Olleik, **Fateme Rajabiyazdi**, et al. (2022). Opioid versus opioid-free analgesia after surgical discharge: A Systematic Review and Meta-Analysis of Randomised Controlled Trials. *The Lancet* 399(10343), 2280-2293, https://doi.org/10.1016/S0140-6736(22)00582-7.

J6. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale.(2021) Designing Patient Data Visualization:A Wicked Problem.*Computer Graphics & Applications*, 41(6):179-186, https://doi.org/10.1109/MCG.2021.3112845.

J5. Charbel El-Kefraoui, **Fateme Rajabiyazdi**, Nicolò Pecorelli, Franco Carli, Lawrence Lee, Liane S Feldman, and Julio F Fiore. (2021). Prognostic Value of the Duke Activity Status Index (DASI) in Patients Undergoing Colorectal Surgery. *World Journal of Surgery*, 45, 3677–3685, https://doi.org/10.1007/s00268-021-06256-4.

J4. **Fateme Rajabiyazdi**, Roshni Alam, Aditya Pal, Joel Montanez, Susan Law, et al. (2021). What Does 'Recovery' Mean to Patients Undergoing Abdominal Surgery? An International Qualitative Study. *JAMA Surgery*, 156(8): 758–765, https://doi.org/10.1001/jamasurg.2021.1557.

J3. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Marie-Josée Brouillette, Lesley K. Fellows, and Nancy E. Mayo. (2020). Development and Usability of a Feedback Tool, "My Personal Brain Health Dashboard", to Improve Setting of Self-Management Goals Among People Living with HIV in Canada, 30(11):3199-3211, *Quality of Life Research Journal*, https://doi.org/10.1007/s11136-020-02555-w.

J2. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Marie-Josée Brouillette, Lesley Fellows, Bärbel Knäuper, and Nancy E. Mayo. (2020). Effectiveness of a Personalized Health Profile on Specificity of Self-Management Goals Among People Living with HIV in Canada: A Protocol for a Blinded Pragmatic Randomized Controlled Trial. *MNI Open Res*, 4:1,https://doi.org/10.12688/mniopenres.12846.1.

J1. Charbel El-Kefraoui, Ghadeer Olleik, Marc-Aurele Chay, Araz Kouyoumdjian, Philip Nguyen-Powanda, **Fateme Rajabiyazdi**, et al. (2020). Opioid Versus Opioid-free Analgesia after Surgical Discharge: Protocol for a Systematic Review and Meta-analysis. *BMJ Open*, 10:e035443. https://doi.org/10.1136/bmjopen-2019-035443.

Peer Reviewed Conference Publications (C)

C13. Shri Harini Ramesh*, Alicia Ouskine*, Elahe Khorassani*, Mona Ebrahimipour, Hillel Finestone, Adrian D.C. Chan, and **Fateme Rajabiyazdi**. (2024). A Data Visualization Tool to Facilitate Patient-Healthcare Provider Communication During Inpatient Stroke Rehabilitation. In *Proceedings of Graphic Interface*. (Accepted).
(🎗 Best Student Paper Award, selected out of 37 accepted papers)

C13. Fateme Rajabiyazdi, Shri Harini Ramesh*, Beck Langstone*, Daniil Kulik*, Justin Pontalba. (2024). TextVista: NLP-Enriched Time-Series Text Data Visualizations. In *Proceedings of Graphic Interface*. (Accepted).

C11. Mahsa Sinaei Hamed*, Laura Reid*, Alice Olorunnife*, David Casciano*, and **Fateme Rajabiyazdi**. (2023). Designing and Developing a Mobile Application for Monitoring & Visualizing Blood Pressure Data. In *Proceedings of IEEE Sensor Applications Symposium*, 1-6, doi: 10.1109/SAS58821.2023.10253972

C10. Connor Haberl*, Graham Cook, Andrew Crean, Calum Redpath, **Fateme Rajabiyazdi**, and Robert DeKemp. (2023). A 4D Visualization Tool for Treatment Planning of Non-Invasive Radioablation in Patients with Ventricular Tachycardia. In *Proceedings of SPIE Medical Imaging*. https://doi.org/10.1117/12.2654482

C9. Irina Kondratova, Helene Fournier, and **Fateme Rajabiyazdi**. Aging in Place Virtual Care Technology from the User Experience Perspective. Human Aspects of IT for the Aged Population. Human-Computer Interaction International (2023). Lecture Notes in Computer Science, 14043, 131-144, Springer, https://doi.org/10.1007/978-3-031-34917-1-10

C8. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale. (2020). Exploring the Design of Patient-Generated Data Visualizations. In *Proceedings of the 46th Graphics Interface Conference*, 362-373, https://doi.org/10.20380/GI2020.36.

C7. **Fateme Rajabiyazdi**, Charles Perin, Jo Vermeulen, Diane Gromala, and Sheelagh Carpendale. (2017). Differences That Matter: In-Clinic Communication Challenges. In *Proceedings of Pervasive Computing Technologies for Healthcare*, 251-260, http://doi.acm.org/10.1145/3154862.3154885.

C6. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale. (2017). The Challenges of Individuality to Technology Approaches to Personally Collected Health Data. In *Proceedings of Pervasive Computing Technologies for Healthcare*, 448-451, https://doi.org/10.1145/3154862.3154923.

C5. **Fateme Rajabiyazdi**. (2016). Designing and Developing Technologies to Facilitate Clinician-Patient Communication. In *Proceedings of the International Conference on Interactive Surfaces and Spaces*, 19-24, https://doi.org/10.1145/3009939.3009943.

C4. Alice Thudt, Jagoda Walny, Charles Perin, **Fateme Rajabiyazdi**, Lindsay MacDonald, Riane Vardeleon, Saul Greenberg, and Sheelagh Carpendale. (2016). Assessing the Readability of Stacked Graphs. In *Proceedings of the 42nd Graphics Interface Conference*, 167–174, https://dx.doi.org/10.20380/GI2016.21.

C3. **Fateme Rajabiyazdi**, Jagoda Walny, Carrie Mah, John Brosz, and Sheelagh Carpendale. (2015). Understanding Researchers' Use of a Large, High-Resolution Display Across Disciplines. In *Proceedings of the International Conference on Interactive Tabletops & Surfaces*, 107–116, http://doi.acm.org/10.1145/2817721.2817735.

C2. **Fateme Rajabiyazdi** and Tom Gedeon. (2012). Hand Grip Strength on a Large PDA: Holding While Reading Is Different from a Functional Task. In *Proceedings of the Sixth International Conference on Complex, Intelligent, and Software Intensive Systems*, 475–480,https://doi.org/10.1109/CISIS.2012.110.

C1. **Fateme Rajabiyazdi** and Tom Gedeon. (2012). Comparing User Performance on an iPad to a 17-inch BackPad. In *Proceedings of the Sixth International Conference on Complex, Intelligent, and Software Intensive Systems*, 469–474, https://doi.org/10.1109/CISIS.2012.215.

Abstracts and Posters (AP)

AP28. Shekinah Mcclymont, Maria Moro, Meg Schwellnus, Tracy Li, Atul Jaiswal, Melanie Chandler, **Fateme Rajabiyazdi**, Adrian Chan, Octavio Santos, Chantal Trudel, Neil W. Thomas. (2024). Developing an Electronic Memory Support System for Individuals with Mild Cognitive Impairment. *Canadian Conference on Gerontology & Geriatrics* (Poster)

AP27. Shri Harini Ramesh*, Helene Fournier, and **Fateme Rajabiyazdi**. (2024). Developing an Electronic Memory Support System for Individuals with Mild Cognitive Impairment .*Ottawa Cardiovascular Research Day* (Poster)

AP26. Mahsa Sinaei Hamed*, Pak Kwan, Matt Klich, Jillian Aurisano, and **Fateme Rajabiyazdi**. (2023). Expert Experiences Designing, Developing and Evaluating Data Visualizations on Large Displays. *IEEE Information Visualization* (Poster)

AP25. Abagael Hudak, Laura Ault, Julien Lariviere-Chartier, Bruce Wallace, Frank Knoefel, Rafik Goubran, **Fateme Rajabiyazdi**, Neil W. Thomas. (2023). Developing A User Interface to Provide Sensor Information On The Daily Activities Of Care Partners Of People Living With Cognitive Impairment. *Canadian Conference on Dementia.* (Poster)

AP24. Olivia Monton, Allister Smith, **Fateme Rajabiyazdi**, and Marylise Boutros. (2023). Understanding Surgeon and Nurse Perspectives on the Use of Patient-Generated Data in the Management of Low Anterior Resection Syndrome. *American Society of Colon and Rectal Surgeons 2023 Annual Scientific Meeting*. (Poster)

AP23. Jenny Moon, et al. **Fateme Rajabiyazdi**, and Marylise Boutros. (2023). Current Rectal Cancer Survivorship Care: Unmet Patient Needs and Fragmented Specialist and Family Physician Care. *American Society of Colon and Rectal Surgeons 2023 Annual Scientific Meeting*. (Podium)

AP22. Neil W. Thomas, Laura Ault, Julien Larivière-Chartier, Padraig Greene*, Mihaela Petriu, **Fateme Rajabiyazdi**, Bruce Wallace, Frank Knoefel, Jeffrey Kaye, and Rafik Goubran. (2022). Smart Home Tech: an Interface to Provide Feedback to Caregivers of Persons Living with Cognitive Impairment. *AAIC Conference*. (Poster)

AP21. Neil W. Thomas, Laura Ault, Julien Larivière-Chartier, Padraig Greene*, Mihaela Petriu, **Fateme Rajabiyazdi**, et al. (2022). Home Sensor Platform Feedback Application: Building a Sensor Feedback System to Support Care Partners of those with Cognitive Impairment. *AGE-WELL Conference*. (Poster)

AP20. Kevin Tran-Nguyen*, Caroline Berger*, Roxanne Bennett, Michelle Wall, Suzanne Morin, and **Fateme Rajabiyazdi**. (2022). A Mobile Application for Post-fracture Acute Pain Management in Older Adults: an Iterative Development Study. *American Society for Bone and Mineral Research*. (Poster)

AP19. Khiran Arumugam, Katayoun Khorramak, Julio Flavio Fiore Junior, Amal Bessissow, **Fateme Rajabiyazdi**, and Suzanne Morin. (2022). The Role of The Community Pharmacists in The Management of Acute Pain in Adults: A Scoping Review. *American Society for Bone and Mineral Research*. (Poster)

AP18. Beck Langstone* and **Fateme Rajabiyazdi**. (2022). Co-Designing Unstructured Text Data Visualization Systems. *Graphics Interface*. (Poster)

AP17. Alicia Ouskine*, Adrian D.C. Chan, and **Fateme Rajabiyazdi**. (2022). Designing Interactive Data Visualizations Representing Recovery Progress for Patients After Stroke. *Graphics Interface*. (Poster)

AP16. Arsh Saleem*, Beck Langstone*, Alicia Ouskine*, and **Fateme Rajabiyazdi**. (2022). Design and Development of PainBit: Portable Device for Supporting Patients with Chronic Pain. *Graphics Interface*. (Poster)

AP15. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Marie-Josee Brouillette, Lesley K Fellows, Barbel Knauper, and Nancy E Mayo. (2021). Effectiveness of a Personalized Health Profile on Specificity of Self-Management Goals Among People Living with HIV in Canada: Findings From a Blinded Pragmatic Randomized Controlled Trial. *Quality of Life Research*, 30(1) Springer. (Poster)

AP14. Olivia Monton, Allister Smith, Jeongyoon Moon, Marie Demian, Richard Garfinkle, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2021). An Online Educational App for Rectal Cancer Survivors with Low Anterior Resection Syndrome: A Mixed Methods Pilot Study. *Canadian Journal of Surgery*. 64, S130. (Abstract)

AP13. Vincent Brissette, Nasra Al Busaidi, Marie Demian, Carol-Ann Vasilevsky, Nancy Morin, **Fateme Rajabiyazdi**, Marylise Boutros. (2021). Sexuality And Rectal Cancer Treatment: A Qualitative Study Exploring Patients' Information Needs and Expectations on Sexual Dysfunction after Rectal Cancer Treatment. *Canadian Journal of Surgery*, 64, S128. (Abstract)

AP12. Rachel Szwimer, Jeongyoon Moon, Marie Demian, A Pang, Nancy Morin, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2021). A Qualitative Study to Explore the Optimal Timing and Approach for the LARS Discussion. *Canadian Journal of Surgery*, 64, S137. (Abstract)

AP11. Yossef Levin, Nasra Al Busaidi, Marie Demian, Nancy Morin, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2021). Financial and Occupational Impact of Low Anterior Resection Syndrome: A Qualitative Study. *American Society of Colon and Rectal Surgeons*. (Poster).

AP10. Rachel Szwimer, Jeongyoon Moon, Marie Demian, Nancy Morin, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2021). Qualitative Study to Explore the Optimal Timing and Approach for the LARS discussion. *Canadian Surgery Forum*. (Poster).

AP9. Vincent Brissette, Nasra Al Busaidi, Marie Demian, Nancy Morin, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2021). "Let's talk about sex?" A Qualitative Study Exploring Patients' Needs and Expectations for Information on Sexual Dysfunction After Rectal Cancer Surgery. *Canadian Surgery Forum*. (Poster)

AP8. Olivia Monton, Allister Smith, Jeongyoon Moon, Marie Demian, Richard Garfinkle, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, and Marylise Boutros. (2021). An Online Educational App for Rectal Cancer Survivors with Low Anterior Resection Syndrome: A Pilot Study. *Canadian Surgery Forum*. (Podium)

AP7. **Fateme Rajabiyazdi**, Roshni Alam, Haley Montgomery, Charbel El Kefraoui, Lawrence Lee, Nancy Mayo, Liane Feldman, and Julio Fiore Jr. (2020). Item Generation and Cognitive Interviewing for A Patient-Reported Outcome Measure of Recovery after Abdominal Surgery. *International Society for Quality of Life Research*, S84-S85, Springer. (Poster)

AP6. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Amanda Austin-Keiller, Marie-Josee Brouillette, Lesley Fellows, and Nancy Mayo. (2020). Goal Quality, Education, and Cognition: Preliminary Analysis of Self-Management Goals Formulated by People Living with HIV. *International Society for Quality of Life Research*, S106, Springer. (Poster)

AP5. **Fateme Rajabiyazdi**, Aditya Pal, et al. (2020). What Does 'Recovery' Mean To Patients Undergoing Abdominal Surgery? An International Qualitative Study. *The Society of American Gastrointestinal and Endoscopic Surgeons*. (Poster)

AP4. Charbel El-Kefraoui, Ghadeer Olleik, Marc-Aurele Chay, Araz Kouyoumdjian, Philip Nguyen-Powanda, **Fateme Rajabiyazdi**, et al. (2019). Opioid Versus Opioid-free Analgesia after Surgical Discharge: a Systematic Review and Meta-analysis. *Experimental Surgery Research Day*. (Poster)

AP3. Seyedeh Maryam Mozafarinia, **Fateme Rajabiyazdi**, and Nancy Mayo. (2019). Measuring Quality of Health Outcome Goals Using Text Mining Techniques. *International Society for Quality of Life Research*, S126, (Poster)

AP2. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale. (2018). Personal Patient-Generated Data Visualizations for Diabetes Patients. (Poster)

AP1. **Fateme Rajabiyazdi**, Charles Perin, and Sheelagh Carpendale. (2015). WESt: Visualizing non-Emergency Surgery Waiting Times. IEEE Information Visualization Conference, https://hal.inria.fr/hal-01587925/ (Poster)

Peer Reviewed Workshop Papers (W)

W7. **Fateme Rajabiyazdi**, Mandy Keck, Christina Stoiber, Jonathan C. Roberts, Hari Subramonyam, Lily Ge, Magdalena Boucher, Benjamin Bach. (2024). EduVis: 2nd IEEE VIS Workshop on Visualization Education, Literacy, and Activities. *IEEE Visualization Workshop*, (5 pages) (Accepted).

W6. Mandy Keck, Samuel Huron, Georgia Panagiotidou, Christina Stoiber, **Fateme Rajabiyazdi**, Charles Perin, Jonathan C. Roberts, Benjamin Bach. (2023). EduVis: Workshop on Visualization Education, Literacy, and Activities. *IEEE Visualization Workshop*, (4 pages), https://doi.org/10.48550/arXiv.2303.10708.

W5. Jonathan C. Roberts, Benjamin Bach, Magdalena Boucher, Fanny Chevalier, Alexandra Diehl, Uta Hinrichs, Samuel Huron, Andy Kirk, Søren Knudsen, Isabel Meirelles, Rebecca Noonan, Laura Pelchmann, **Fateme Ra-**

jabiyazdi, and Christina Stoiber. (2022). Reflections and Considerations on Running Creative Visualization Learning Activities. *4th IEEE Workshop on Visualization Guidelines in Research, Design, and Education at IEEE VIS*, https://doi.org/10.48550/arXiv.2209.09807, (author ordered alphabetically).

W4. Jan Aerts, Wolfgang Aigner, Benjamin Bach, Fearn Bishop, Magdalena Boucher, Peter C.-H. Cheng, Alexandra Diehl, Jason Dykes, Sarah Hayes, Uta Hinrichs, Samuel Huron, Christoph Kinkeldey, Andy Kirk, Søren Knudsen, Doris Kosminsky, Tatiana Losev, Areti Manataki, Andrew Manches, Isabel Meirelles, Luiz Morais, Till Nagel, Rebecca Noonan, Georgia Panagiotidou, Laura Pelchmann, **Fateme Rajabiyazdi**, Christina Stoiber, Tatiana Landesberger, Jagoda Walny, and Wesley Willett. (2022). Me-ifestos for Visualization Empowerment in Teaching (and Learning?). *IEEE Alt.Vis*, https://openreview.net/forum?id=FpkLUpGAgvv, (author ordered alphabetically).

W3. **Fateme Rajabiyazdi**, Charles Perin, Julie Babione, Joseph Tropiano, Maria Santana, Jaime Kaufman, William Ghali, Peter Sargious, and Sheelagh Carpendale. Challenges Involving Patients in their Care Plan from Clinicians' Perspectives. (2016). In *Proceedings of the CHI Workshop on Interactive Systems in Healthcare (WISH)*.

W2. Xin Tong, Diane Gromala, Lyn Bartram, **Fateme Rajabiyazdi**, and Sheelagh Carpendale. (2015). Evaluating the Effectiveness of Three Physical Activity Visualizations - How People Perform vs. Perceive. In *eProceedings of the IEEE Information Visualization Conference*.

W1. Tamara Flemisch, **Fateme Rajabiyazdi**, Mona Hosseinkhani, and Sheelagh Carpendale. (2015). NeckLan: Language as Jeweller. In *eProceedings of the IEEE Information Visualization Conference*.

Opinion/Editorial (O)

O1. Beck Langstone*, Alicia Ouskine*, Connor Haberl*, **Fateme Rajabiyazdi**. Critical Reflections on Teaching Data Visualization Free Form. Medium. (2022). https://medium.com/@healthvisfutures/critical-reflections-on-teaching-data-visualization-free-form-db5df2d42b31

Thesis (T)

T2. **Fateme Rajabiyazdi**. Exploring the Design of Visualizations to Facilitate Patient-Provider Communication. *PhD Thesis, University of Calgary, 2018.* http://dx.doi.org/10.11575/PRISM/34900

T1. **Fateme Rajabiyazdi**. Design and Development of Interface for Different Tablet Sizes. *Master Thesis, School of Computer Science, Australian National University, 2012.* Link

Under Review/Revisions

Jx. Mahsa Sinaei Hamed*, Pak Kwan, Matt Klich, Jillian Aurisano, and **Fateme Rajabiyazdi**. (2024). The Elephant in the Room: Expert Experiences Designing, Developing and Evaluating Data Visualizations on Large Displays. *ACM ISS* (Under revision)

Jx. Shri Harini Ramesh*, Helene Fournier and **Fateme Rajabiyazdi**. (2024). Cardiac Rehabilitation Pathways in Older Adults. *JMIR - Aging*. (Under review)

Cx. Shri Harini Ramesh* and **Fateme Rajabiyazdi**. (2024). Challenges and Opportunities of Teaching Data Science and Data Visualization from Student Perspectives. *IEEE VIS*. (Under review)

Cx. Mariana Perez Rodriguez*, **Fateme Rajabiyazdi** and Juan Jimenez Garcia (2024). The impact of large interactive surfaces on clinical consultations. *PervasiveHealth*. (Under review)

Media Appearance

CTV News Ottawa September 2023
Title: Utilizing Technology to Close the Doctor-Patient Gap
Full Interview: https://ottawa.ctvnews.ca/video?clipId=2775511

Carleton's Challenge Campaign February 2023
Title: Improving Doctor-Patient Communications
Full Story: https://challenge.carleton.ca/health-data-visual-displays-rajabiyazdi/

Invited Talks

Data Day 10.0 - Carleton University March 2024
Title: Supporting Patient-Clinician Collaboration on Shared Surfaces

Biomedical Engineering Seminar Series - University of Ottawa October 2023
Title: Empowering Patients in their Care using Data Visualization

Faculty of Health Sciences - University of Ottawa April 2023
Title: Empowering Patients in their Care using Data Science

Ingenious Talks Lecture Series - Carleton University November 2022

Title: Enhancing Patient Collaboration in Healthcare using Interactive Data Visualization

Policy Horizons Canada, Government of Canada October 2022
Title: Innovative Text Data Visualization

Privy Council Office - Security Centre of Excellence Speakers Series September 2022
Title: AI, ML, NLP, Unstructured Text Data Visualization
Office of the Prime Minister, Ottawa, Canada

Duke Kunshan University August 2022
Title: How to design and develop individualized health data vis?

Dagstuhl - Visualization Empowerment: How to Teach/Learn Data Visualization June 2022
Title: Teaching Data Visualization Free From
Schloss Dagstuhl, Wadern, Germany

Advancing New Canadian Women in Technology - uOttawa/Carleton University January 2022
Title: Data Visualization for Health

Guest Speaker, SYSC4201 course - Carleton University February 2022
Title: Information Visualization Systems to Support Patients with their Medical Care

Nuclear Medicine Research Rounds - Ottawa Hospital September 2021
Title: Multi-person Interactions with Medical Data on Large Displays

Carleton University Institute for Data Science - Seminar Series April 2021
Title: Exploring the Design and Development of Patient Health Data Visualizations

IEEE Ottawa Section: Engineering in Medicine and Biology Society February 2021
Title: Information Visualization to Support Patients' Medical Care Management

Department of Computer Science, Toronto Metropolitan University July 2020
Title: Designing interactive Data Visualization Systems to Enhance Patient Health

Department of Computer Science & Software Engineering, Concordia University April 2020
Title: Designing and Developing Information Visualization Tools to Support Patients with their Medical Care

Minimally Invasive Surgery Research Day, McGill University Health Center October 2019
Title: What does 'recovery' Mean to Patients Undergoing Abdominal Surgery?
Montreal General Hospital, Montreal, Canada

Human Factors Interest Group, University of Toronto April 2018
Title: Designing and Developing Tools to Enhance Patient-Physician Communication
Toronto University, Toronto, Canada

Knowledge and Technology Transfer

Quebec Health Surgical Outcome Tracker - under development 2023 - present
This data visualization system enables surgical units across Quebec to track and analyze the quality of care offered to patients. Hospitals can view a summary of patient demographics, complication rates, readmission rates, etc.

PainApp - under development 2020 - present
PainApp is the first mobile application that was developed with a user-center design approach to support older adults in managing their pain after a fracture. I am the co-principal investigator in the project, leading the design team.

MyCareCompass 2018 - 2020
MyCareCompass is the first platform designed for patients with chronic conditions in Alberta to manage their care. My PhD research and data visualization designs were incorporated into this platform.

Supervision and Mentoring HQP

I have been actively supervising students at various levels at Carleton University from the Department of Systems and Computer Engineering and the Department of Human-Computer Interaction. Additionally, I have continued co-supervising students from my postdoctoral studies at McGill University. The details of my supervision activities are provided below:

Postdoctoral (1)

Dr. Elahe Khorasani
Postdoctoral Fellow, McGill University Health Center Spring 2021 - Winter 2024
Primary Supervisor: Dr. Julio Fiore (McGill University)
Project: Developing a Patient-Reported Outcome Measure to Assess Recovery after Abdominal Surgery

Level	In-Progress	Completed
Postdoctoral fellows	0	1
PhD students	3	0
Master's students	2	4
Master's of engineering students	0	2
Undergraduate students	1	7
Research assistants	1	5
Fourth-year undergraduate projects	0	32 (9 projects)

Table 1: Total HQP Supervision Record (2021-2014).

PhD Students (3)

Connor Harbel
PhD-SCE, Biomedical Engineering, Carleton University — Winter 2024 - present
Co-Supervisor: Dr. Robert DeKemp
Thesis: Evaluating Cardiac Image Registration Software

Shri Harini Ramesh
PhD-SCE, Biomedical Engineering, Carleton University — Fall 2023 - present
Thesis: Designing Data Visualization System for Analyzing the Virtual Cardiac Rehabilitation (VCR)

Mahsa Sinaee Hamed
PhD-SCE, Software Engineering, Carleton University — Fall 2022 - present
Thesis: Developing Patient-Clinician Communication Technology for Older Adults with Chronic Conditions

Master's Students (4)

Mariana Perez Rodriguez
MDes, Industrial Design, Carleton University — Fall 2022 - Spring 2024
Primary Supervisor: Dr. Juan Garcia
Thesis: Designing an Interface on Tabletop to Support Patients and Clinicians with Health Decision-Making

Beck Langstone
MASc-HCI, Carleton University — Fall 2021 - Summer 2023
Thesis: Designing and Developing Patient Data Collection via Virtual Assistant AI Technology

Alicia Ouskine
MASc-HCI, Carleton University — Fall 2021 - Summer 2023
Co-Supervisor: Adrian Chan
Thesis: Designing and Developing Data Visualization for Patients in Rehabilitation Centers

Connor Harbel
MASc, Biomedical Engineering, Carleton University — Fall 2021 - Summer 2023
Co-Supervisor: Dr. Robert DeKemp
Thesis: Cardiac Image Registration

Master of Engineering Students (2)

Faisal Zaki
MEng Project Supervision, Electrical and Computer Engineering, Carleton University — Winter 2024
Project: Visualizing Hospital Bed Patient Transfer Data

Abhishek Ahuja
MEng Project Supervision, Electrical and Computer Engineering, Carleton University — Winter 2023
Project: Visualizing Quality Indicators in Surgical Units in Hospitals across Quebec

Undergraduate Students (8)

Esosa Ohangbon
Bachelor Mechanical Engineering
I-CUREUS, Carleton University — Summer 2024 - present

Darwin Jull
Bachelor Biomedical Computing
I-CUREUS, Carleton University — Fall 2023 - Winter 2024
An Interview Study with Cardiac Rehabilitation Team

Ali Shajari
Bachelor Art
SaPP, Carleton University — Fall 2023

Developing Datathons for Data Science Course

Erin Lui-Hing
Bachelor Biomedical Computing
I-CUREUS, Carleton University — Fall 2022
Developing and Evaluating a Pain Tracker

Ala'A Alsatari
Bachelor of Neuroscience
I-CUREUS, Carleton University — Fall 2022
Usability and Practical Utility Factors of VCR for Cardiac Rehabilitation

Padraig Greene
Bachelor Biomedical Computing
USRA, Queen's University — Summer 2022
Designing an Interactive Visualization System for Dementia

Arsh Saleem
Bachelor of Engineering Biomedical and Electrical
Co-op Program, I-CUREUS, Carleton University — Summer 2021 - Winter 2022
Designing and Developing an Accessible Pain Tracker

Rahel Gunaratne
Bachelor Software Engineering
I-CUREUS, Undergraduate Student Researcher, Carleton University — Summer 2021 - Winter 2022
Designing an Interactive Visualization System to Enhance Student Awareness on EDI

Research Assistant/Mentee (6)

Abagael Huda
Master of Chemistry, University of Ottawa — Summer 2023 - present
Developing an interface to provide information on activities of care partners of people living with cognitive impairmet

Daniil Kulik
Master of Computer Science, Carleton University — Summer 2022 - Fall 2024
Developing Text Data Visualization Systems

Abhishek Mayurbhai Patel
MEng, Electrical and Computer Engineering, Carleton University — Fall 2022 - Summer 2023
Developing a Web Platform for Collecting Large Datasets

Sanhita Paluskar
MEng, Electrical and Computer Engineering, Carleton University — Summer 2023
Developing HealthVis Research Center Website

Kevin Tran
Research Associate, McGill University — 2021-2022
Project: Developing a Mobile app to Support Patients Manage Pain after a Bone Fracture

Caroline Berger
Research Associate, McGill University — 2020-2021
Project: Designing a Mobile app to Support Patients Manage Pain after a Bone Fracture

Fourth-Year Undergraduate Engineering Projects (32)

Darwin Jull, Nikita Yovchev, Maven Uyttewaal — Fall 2023 - Winter 2024
Role: Supervisor, Application for Monitoring SID for parents

Amir Laghai, Duncan MacLeod, William Sloan — Fall 2023 - Winter 2024
Role: Co-supervisor, Audio Spatialization and Direction Finding

Anthony Massaad, Christopher Semaan, Cory Helm, Nicolas Tanouchev — Fall 2023 - Winter 2024
Role: Co-supervisor, Emergency GPS Tracker

Khusmeet Ahluwalia, Momin Mushtaha, Gineydi Orozco, Priya Tailor — Fall 2022 - Winter 2023
Role: Supervisor, Connecting Health Data from iPad to a Large Display

Nafe Ahmed, Aayush Mallya, Ishanov Sahni, Monishkumar Sivakumar — Fall 2022 - Winter 2023
Role: Supervisor, Building a Blood Pressure Monitor

Sherif El Halafawy, Phillippe Forster, Malak Saifelnasr, Freddy Sourial — Fall 2022 - Winter 2023
Role: Co-supervisor, Low Power Emergency Tracker for People Living with Dementia

Menna AbdelHadi, Hanan Alshatti, Eline-Elorm Nuviadenu, Hiu Sum Jaime Yue — Fall 2022 - Winter 2023
Role: Co-supervisor, Activity of Daily Living Assessment-Stove/Oven use

Laura Reid, David Casciano, Alice Olorunnife Fall 2021- Winter 2022
Role: Supervisor, Visualizing Blood Pressure Data

Jack Hendry, Justice Ayela, Haoyu Xu Fall 2021 - Winter 2022
Role: Supervisor, Connecting Health Data from iPad to a Large Display

Thesis Examination Committees

Examiner Committee Member (15)

Pavaris Thongthanomkul, Master of HCI, Carleton University April 2024
Supervisor: Dr. Lesley Istead

Michael Aziz, MASc Electrical and Computer Engineering, Carleton University April 2024
Supervisor: Dr. Yvan Labiche

Eman El-Fayomi, PhD Proposal, School of Information Technology, Carleton University December 2023
Supervisor: Dr. Audrey Girouard

Ebubechukwu Ubochi, Master of Information Technology, Carleton University September 2023
Supervisor: Dr. David Thue

Daniela Napoli, PhD Proposal, Computer Science, Carleton University August 2023
Supervisor: Dr. Sonia Chiasson

Devvrat Bhardwaj, MASc Electrical and Computer Engineering, University of Ottawa May 2023
Supervisor: Dr. Pascal Fallavollita

Kelly Ko, Master of HCI, Carleton University May 2023
Supervisor: Dr. Vicky McArthur

Bahareh Chimehi, MASc Electrical and Computer Engineering, Carleton University May 2023
Supervisor: Dr. Bruce Wallace, Co-Supervisor: Dr. Rafik Goubran

Cathy Zhang, MASc Information Technology, Carleton University December 2022
Supervisor: Dr. Omair Shafiq

Maryam Barani, PhD Comp Exam, Systems and Computer Engineering, Carleton University May 2022
Supervisor: Dr. Yvan Labiche

Maryam Sadeghian, Master of HCI, Carleton University April 2022
Supervisor: Dr. Vicky McArthur

Leen Yassin, MASc Electrical and Computer Engineering, Carleton University May 2022
Supervisor: Dr. Bruce Wallace, Co-Supervisor: Dr. Rafik Goubran

Daniel D. Lowcay, MASc Civil Engineering, Carleton University September 2021
Supervisor: Dr. Burak Gunay, Co-Supervisor: Dr. Liam O'Brien

Elaheh Samimi, MASc Information Technology, Carleton University September 2021
Supervisor: Dr. Robert Teather

Ramy Maarouf, MASc Information Technology, Carleton University August 2021
Supervisor: Dr. Ashraf Matrawy

Examination Committee Chair (16)

Anas Tiane, PhD Defence, Electrical Engineering December 2023
Supervisor: Dr. Hicham Chaoui

Aroosha Fareghdeli, PhD Comp Exam, Biomedical Engineering July 2023
Supervisor: Dr. Leila Mostaço-Guidolin

Nadia Abzan, PhD Comp Exam, Biomedical Engineering July 2023
Supervisor: Dr. Leila Mostaço-Guidolin

Youcef Kardjadja, PhD Comp Exam, Electrical and Computer Engineering June 2023
Supervisor: Dr. Mohamed Ibn Kahla

Zein Hajj-Ali, MASc Biomedical Engineering January 2023
Supervisor: Dr. James Green

Jaser El-Habrouk, MASc Biomedical Engineering January 2023
Supervisor: Dr. James Green

Sereda Bohdana, MASc Electrical and Computer Engineering, Carleton University December 2022
Supervisor: Dr. Jason Jaskolka

Román Cárdenas Rodríguez, PhD Proposal, Electrical and Computer Engineering November 2022
Supervisor: Dr. Gabriel A. Wainer

Diego Politis, MASc Biomedical Engineering September 2022

Supervisor: Dr. Adrian Chan

Emma Farago, PhD Proposal, Biomedical Engineering, Carleton University — June 2022
Supervisor: Dr. Adrian Chan

Nadia Farrag, PhD Proposal, Biomedical Engineering, Carleton University — November 2021
Supervisor: Yuu Ono

Joe samuel, MASc Electrical and Computer Engineering, Carleton University — September 2021
Supervisor: Dr. Jason Jaskolka

Natasha Kunchur, PhD Proposal, Biomedical Engineering, Carleton University — August 2021
Supervisor: Dr. Leila Mostaço-Guidolin

Yasmina Souley Dosso, PhD Proposal, Biomedical Engineering, Carleton University — August 2021
Supervisor: Dr. James Green

Andy Huang, MASc Electrical and Computer Engineering, Carleton University — May 2021
Supervisor: Dr. Sreeraman Rajan, Co-Supervisor: Dr. Bhashyam Balaji

Satyake Bakshi, MASc Biomedical Engineering , Carleton University — April 2021
Supervisor: Dr. Sreeraman Rajan

Established National and International Collaborations

Canadian Government and Healthcare Organizations

National Research Council Canada (NRC), Canada — 2021 - present
Dr. Hélène Fournier, Research Officer Human-Computer Interaction Department, NRC
Outcomes: Co-awarded a grant, published a paper, supervised 2 HQP

Bruyère Research Institute, Ottawa, Canada — 2021 - present
Dr. Neil Thomas, Assistant Professor, Division of Neurology, Department of Medicine, University of Ottawa
Outcomes: Co-published 2 posters, supervised 1 HQP, developing a user interface for patient home monitoring system

Winchester District Memorial Hospital, Winchester, Canada — 2021 - present
Dr. Mohamed Gazarin, Chief Research Officer
Outcomes: Collaborating on a research project

Montreal General Hospital, Montreal, Canada — 2020 - present
Dr. Liane Feldman, Surgeon-in-chief, McGill University Health Centre
Outcomes: Collaborating on a quality improvement project at Montreal General Hospital

Jewish General Hospital, Montreal, Canada — 2020 - present
Dr. Marylise Boutros, Program Director for the Colorectal Surgery Residency Program
Outcomes: Co-awarded 2 grants, co-published 1 journal and 9 posters

Canadian Industry

Able Innovations, Ottawa, Canada — 2023 - present
Intelligent Insights – Patient Transfers
Outcomes: Awarded 1 grant, supervised 1 MEng student project

Novacene AI, Ottawa, Canada — 2021 - present
Marcelo Bursztein, Company's founder and CEO Novacene AI Corporation
Outcomes: Awarded 1 grant, supervised 1 MASc student, co-submitted 1 paper publication

International Research Collaborations

Stanford University, United States — 2024-present
Dr. Hari Subramonyam Assistant Professor, Stanford University
Outcomes: working on identifying health disparity in cardiac rehab, co-organized 1 workshop at the IEEE VIS'23/24

University of Edinburgh — 2023-present
Dr. Benjamin Bach, Associate Professor, University of Edinburgh
Outcomes: co-published 1 journal paper, 2 workshop papers, co-organized 2 workshops at the IEEE VIS'23/24

University of Applied Sciences Upper Austria, Austria — 2023-present
Dr. Mandy Keck, Assistant Professor, University of Applied Sciences Upper Austria
Outcomes: co-published 1 journal paper, 2 workshop papers, co-organized 2 workshops at the IEEE VIS'23/24

University of Massachusetts Amherst, United States — 2022-present
Dr. Ali Sarvghad Assistant Professor, Manning College of Information & Computer Sciences
Outcomes: Collaborating on a research project to develop an AI-assisted technology for older adults.

University of Cincinnati, United States 2022-present
Dr. Jillian Aurisano Assistant Professor, University of Cincinnati Electrical Engineering & Computer Science
Outcomes: Collaborating on a research project to develop technologies for large interactive displays.

Oxford Brooks University, United Kingdom 2019-2020
Centre for Movement, Occupational and Rehabilitation Science with Dr. Mansoubi and Dr. Shelly Coe.
Outcomes: Collaborated on a research project to use text mining techniques in a systematic review study.

Academic Service

Grant Review

Review Panel, NSERC Research Tools and Instruments (RTI) 2023-2024
Computer, Mathematical, and Statistical Sciences Committee, 31 applications
Reviewer, Canada Foundation for Innovation (CFI) 2022
John R. Evans Leaders Fund (JELF), 1 application

Conference Program Committees and Chairing

Session Chair, Graphics Interface Conference 2024
International Program Committee, EuroVis 2024
Session Chair, IEEE VIS EduVis Workshop 2023
Student Poster Judge, Graphics Interface Conference 2023
Session Chair, Graphics Interface Conference 2023
Tutorial Chair, IEEE SAS 2023
Program Committee, CHI Late-Breaking Work (LBW) 2022-2023
Strategy Planning Committee, Graphics Interface Conference 2020-2022
Poster Chair, Graphics Interface Conference 2022
Publicity Chair, ACM Interactive Surfaces and Spaces (ISS) Conference 2022
Poster Chair, ACM Interactive Surfaces and Spaces (ISS) Conference 2021
Program Committee, IEEE Information Visualization (InfoVis) Short Papers 2020, 2021, 2023, 2024
Posters Chair, McGill University Health Center Injury, Repair, Recovery Annual Research Day 2020
Video Preview Chair, ACM Interactive Surfaces and Spaces (ISS) Conference 2019
Best Poster Award Committee, McGill University Experimental Surgery Research Day 2019
Program Committee, ACM Intelligent User Interfaces (IUI) Conference Posters and Papers 2019-2021

Conference/Journal Paper Reviewer

CHI 2016-2024, EduVis 2023, EuroVis 2023-2024, VIS 2020-2024, UIST 2021, GI 2021-2023, AMIA 2017-2021, DIS 2018-2019, TEI 2017& 2021, IUI 2016-2022, IMWUT 2019

Department and University Services

Department Representative, Convocation, Carleton University - Faculty of Engineering and Design 2022-2023
Department Representative, Recruitment, Carleton University - Faculty of Engineering and Design 2023, 2024
EDI Council Member, Carleton University - Faculty of Engineering and Design 2022-present
EDI Committee Member, Carleton University - Department of Systems and Computer Engineering 2021-present
Student Awards Committee, Carleton University - Department of Systems and Computer Engineering 2022-2023
sWall Coordinator Carleton University - Department of Systems and Computer Engineering 2021-2023

Community Outreach

Student Competition Judge, Advancing New Canadian Women in Technology February 2022
Podcast guest, Carleton University Women in Science and Engineering Words Podcast November 2021
Speaker, Carleton University SCE: Transition to Faculty Position December 2021
Speaker, Carleton University SCETalk: What is Data Visualization October 2021
Speaker, Carleton University, Passionate Minds Unit 101 Summer Webinar August 2021
Panelist, Carleton University-WISE National Engineering Month Event Information March 2021

Professional Development

Academic CV Workshop for Tenure & Promotion, FED, Carleton University June 2024
Certificate of Course Design Fundamentals, TLS, Carleton University August 2023
Kinàmàgawin Indigenous Learning Certificate, Carleton University August 2022
Certificate of University Teaching, TLS, Carleton University April 2022

Professional Membership

Member, Canadian Medical and Biological Engineering Society (CMBES) 2022-present
Member, Institute of Electrical and Electronics Engineers (IEEE) 2021-present