

Fateme Rajabiyazdi

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Work Experience

Assistant Professor - Carleton University, Canada Jan 2021–present
Department of Systems and Computer Engineering

Postdoctoral Fellow - McGill University, Canada Jan 2019–Dec 2020
Supervisor: Dr. Julio Fiore Project Leader: Dr. Liane Feldman

Education

PhD in Computer Science - Information Visualization - University of Calgary 2014–2018
Thesis: Exploring the Design of Visualizations to Facilitate Patient-Provider Communication (GPA: 4.0)
Supervisors: Dr. Sheelagh Carpendale and Dr. Lora Oehlberg
Committee: Dr. Charles Perin (University of Victoria) and Dr. Diane Gromala (Simon Fraser University)

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

Bachelor in Software Engineering - University of Tehran 2006–2010
Thesis: Finding Social Network Graphs in News Websites
Supervisor: Dr. Masoud Asadpour

Journal Publications (J)

J4. **Fateme Rajabiyazdi**, Roshni Alam, Aditya Pal, et al. (2021). What does 'recovery' mean to patients undergoing abdominal surgery? An international qualitative study. *JAMA Surgery*, Accepted for Publication on March 4th 2021.

J3. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Marie-Josée Brouillette, Lesley K. Fellows, and Nancy E. Mayo. 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. *Quality of Life Research Journal*, Accepted for Publication on June 3rd 2020.

J2. Maryam Mozafarinia, **Fateme Rajabiyazdi**, Marie-Josée Brouillette, Lesley Fellows, Bärbel Knäuper, and Nancy E. Mayo. 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* 2020, 4:1.

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

Conference Publications (C)

C8*. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale. Exploring the Design of Patient-Generated Data Visualizations. In *Proceedings of the 46th Graphics Interface Conference, GI'20*, pages 362-373. ACM, 2020. [DOI](#) ***Invited for submission to IEEE TVCG Journal**.

C7. **Fateme Rajabiyazdi**, Charles Perin, Jo Vermeulen, Diane Gromala, and Sheelagh Carpendale. Differences That Matter: In-Clinic Communication Challenges. In *Proceedings of the 2017 Pervasive Computing Technologies for Healthcare*, pages 251-260. ACM, 2017. [DOI](#)

C6. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale. The Challenges of Individuality to Technology Approaches to Personally Collected Health Data. In *Proceedings of the 2017 Pervasive Computing Technologies for Healthcare*, pages 448-451. ACM, 2017. [DOI](#)

C5. **Fateme Rajabiyazdi**. Designing and Developing Technologies to Facilitate Clinician-Patient Communication. In *Proceedings of the 2016 International Conference on Interactive Surfaces and Spaces*, pages 19-24. ACM, 2016. [DOI](#)

C4. Alice Thudt, Jagoda Walny, Charles Perin, **Fateme Rajabiyazdi**, Lindsay MacDonald, Riane Vardeleon, Saul Greenberg, and Sheelagh Carpendale. Assessing the Readability of Stacked Graphs. In *Proceedings of the 42nd Graphics Interface Conference, GI'16*, pages 167–174, 2016. [DOI](#)

C3. **Fateme Rajabiyazdi**, Jagoda Walny, Carrie Mah, John Brosz, and Sheelagh Carpendale. Understanding Researchers' Use of a Large, High-Resolution Display Across Disciplines. In *Proceedings of the 2015 International Conference on Interactive Tabletops & Surfaces*, pages 107–116. ACM, 2015. [DOI](#)

C2. **Fateme Rajabiyazdi** and Tom Gedeon. Hand Grip Strength on a Large PDA: Holding While Reading Is Different from a Functional Task. In *Proceedings of the 2012 Sixth International Conference on Complex, Intelligent, and Software Intensive Systems*, pages 475–480, 2012. [DOI](#)

C1. **Fateme Rajabiyazdi** and Tom Gedeon. Comparing User Performance on an iPad to a 17-inch BackPad. In *Proceedings of the 2012 Sixth International Conference on Complex, Intelligent, and Software Intensive Systems*, pages 469–474, 2012. [DOI](#)

Peer Reviewed Abstracts and Posters (AP)

AP12. Rachel Szwimer, Jeongyoon Moon, Marie Demian, Nancy Morin, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, Marylise Boutros. Qualitative Study to Explore the Optimal Timing and Approach for the LARS discussion. American Society of Colon and Rectal Surgeons Annual Scientific Meeting, 2020.

AP11. Brissette, V; Nasra Al Busaidi, Demian, M, Nancy Morin, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, Marylise Boutros. "Let's talk about sex?" A Qualitative Study Exploring Patients' Needs and Expectations for Information on Sexual Dysfunction After Rectal Cancer Surgery. American Society of Colon and Rectal Surgeons Annual Scientific Meeting, 2020.

AP10. Olivia Monton, Allister Smith, Jeongyoon Moon, Marie Demian, Richard Garfinkle, Carol-Ann Vasilevsky, **Fateme Rajabiyazdi**, Marylise Boutros. An Online Educational App for Rectal Cancer Survivors with Low Anterior Resection Syndrome: A Pilot Study. American Society of Colon and Rectal Surgeons Annual Scientific Meeting, 2020.

AP9. **Fateme Rajabiyazdi**, Roshni Alam, Haley Montgomery, Charbel El Kefraoui, Lawrence Lee, Nancy Mayo, Liane Feldman, and Julio Fiore Jr. Item generation and cognitive interviewing for a patient-reported outcome measure of recovery after abdominal surgery. Poster presentation at International Society for Quality of Life research, 27th annual conference, S84-S85, Springer, 2020.

AP8. Maryam Mozafarina, **Fateme Rajabiyazdi**, Amanda Austin-Keiller, Marie-Josée Brouillette, Lesley Fellows, Nancy E Mayo. Goal quality, education, and cognition: preliminary analysis of self-management goals formulated by people living with HIV. Poster presentation at International Society for Quality of Life research, 27th annual conference, S106-S106, Springer, 2020.

AP7. **Fateme Rajabiyazdi**, Aditya Pal, Roshni Alam, Joel Montanez, Susan Law, Lawrence Lee, Nicolò Pecorelli, Watanabe Yusuke, Chiavegato D Luciana, Massimo Falconi, Hirano Satoshi, Nancy E Mayo, Liane S Feldman, and Julio F Fiore Jr. What Does ‘Recovery’ Mean To Patients Undergoing Abdominal Surgery? An International Qualitative Study. Poster presentation at the Society of American Gastrointestinal and Endoscopic Surgeons, Cleveland, OH, USA, 2020.

AP6.* Charbel El-Kefraoui, Ghadeer Olleik, Marc-Aurele Chay, Araz Kouyoumdjian, Philip Nguyen-Powanda, **Fateme Rajabiyazdi**, Uyen Do, Alexa Derksen, Tara Landry, Alexandre Amar-Zifkin, Ramanakumar Agnihotram, Marc Martel, Gabriele Baldini, Liane S Feldman, and Julio F Fiore Jr. Opioid Versus Opioid-free Analgesia after Surgical Discharge: a Systematic Review and Meta-analysis. Poster presentation at Experimental Surgery Research Day, Montreal, Canada, 2019. ***Best poster award.**

AP5. Seyedeh Maryam Mozafarina, **Fateme Rajabiyazdi**, and Nancy Mayo. Measuring quality of health outcome goals using text mining techniques. Poster presentation at International Society for Quality of Life research, 26th annual conference, San Diego, USA, S126-S126, Springer, 2019.

AP4. Seyedeh Maryam Mozafarina, **Fateme Rajabiyazdi**, and Nancy Mayo. Text mining application for measuring quality of health outcome goals. Poster presentation at Centre for Outcome Research & Evaluation Research Day, Montreal, Canada, 2019.

AP3. **Fateme Rajabiyazdi**, Charles Perin, Lora Oehlberg, and Sheelagh Carpendale. Personal Patient-Generated Data Visualizations for Diabetes Patients. Poster presentation at the *IEEE Information Visualization Conference*, Berlin, Germany, 2018. [Link](#)

AP2. Julie Babione, **Fateme Rajabiyazdi**, Charles Perin, Joseph Tropiano, Megan Cosby, Maria Santana, Jaime Kaufman, Sheelagh Carpendale, William Ghali, and Peter Sargious. Identifying Opportunities for Innovation in Patient-Centred Care Plans Through User-Centred Design Research. Poster presentation at *the Patient Oriented Research Summer Institute Conference*, Canada, Calgary, 2016.

AP1. **Fateme Rajabiyazdi**, Charles Perin, and Sheelagh Carpendale. WEST: Visualizing non-Emergency Surgery Waiting Times. Poster presentation at the *IEEE Information Visualization Conference*, Chicago, USA, 2015. [Link](#)

Peer Reviewed Workshop Papers (W)

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. In *Proceedings of the CHI Workshop on Interactive Systems in Healthcare (WISH’16)*, ACM, 2016. [Link](#)

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

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

Thesis (T)

T3. **Fateme Rajabiyazdi**. Exploring the Design of Visualizations to Facilitate Patient-Provider Communication. *PhD Thesis, University of Calgary, 2018*. [Link](#)

T2. **Fateme Rajabiyazdi**. Design and Development of Interface for Different Tablet Sizes. *Master Thesis, School of Computer Science, Australian National University, 2012*. [Link](#)

T1. **Fateme Rajabiyazdi**. Finding Social Network Graphs in News Websites, *Bachelor Thesis (in Persian), School of Electrical and Computer Engineering, University of Tehran, 2010*.

Grants

Principal-Investigator:

NSERC Discovery Grants Program 2021-2026

Exploring the design and development of patient data visualizations on shared displays

Collaborations:

CIHR Planning and Dissemination Grant 2019, Transforming Post-Fracture Acute Pain Management in Older Men and Women through Mobile Health Application, PI: Dr. Suzanne Morin.

CIHR Project Grant Fall 2019, Opioid versus opioid-free analgesia after surgical discharge: a systematic review and meta-analysis, PI: Dr. Julio Fiore.

Scholarship and Awards

Postdoctoral Scholarship , Fonds de la Recherche du Quebec Sante (FRQS), 2020-2021	\$45,000
Computer Science Department Research Award , University of Calgary, 2017-2018	\$11,000
W21C Health Services Research Scholarship , Alberta Health Services, 2016-2017	\$30,000
W21C Health Services Research Scholarship , Alberta Health Services, 2015-2016	\$30,000
Computer Science Department Research Award , University of Calgary, 2016-2017	\$8,000
Faculty of Graduate Studies Travel Award , University of Calgary, 2015	\$1,000
Computer Science Department Research Award , University of Calgary, 2015-2016	\$2,000
Computer Science Department Research Award , University of Calgary, 2014-2015	\$8,000

Teaching Experience

Instructor - <i>SYSC2006D Foundations of Imperative Programming</i> - Carleton University	Winter 2021
Guest Lecturer - <i>Observational Research Techniques</i> - McGill University	Fall 2020
Guest Lecturer - <i>Introduction to Information Visualization</i> - University of Calgary	Fall 2017
Guest Lecturer - <i>Visualization and Visual Analytics</i> - University of Calgary	Fall 2016
Course Developer & Teaching Assistant - <i>Thinking with Data</i> - University of Calgary	Summer 2017
Teaching Assistant - <i>Introduction to Information Visualization</i> - University of Calgary	Fall 2017
Teaching Assistant - <i>Visualization and Visual Analytics</i> - University of Calgary	Fall 2016
Teaching Assistant - <i>Human-Computer Interaction</i> - University of Calgary	Winter 2015
Teaching Assistant - <i>Introduction to CS Application Software</i> - University of Calgary	Winter 2014
Teaching Assistant - <i>eCommerce</i> - Australian National University	Winter 2012
Teaching Assistant - <i>Microprocessors</i> - University of Tehran	Winter 2009

Supervision and Mentoring

Graduate Advisory - Committee Member:

Mohamed Gazarin	PhD student	Dept of Health Sciences	Carleton University	2021-present
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Co-Supervision:

Caroline Berger	Research assistant	Dept of Medicine	McGill University	2020-2021
Olivia Monton	Medical student	-	McGill University	2020-2021
Vincent Brissette	Medical student	-	McGill University	2020-2021
Rachel Szwimer	Medical student	-	McGill University	2020-2021
Makena Pook	Master student	Dept of Exp Surgery	McGill University	2020
Najla Al Ghaithi	Surgery resident	-	McGill University	2020
Yossef Levin	Medical student	-	McGill University	2020
Aditya Pal	Medical student	-	McGill University	2019-2020

Mentorship:

Charbel El-Kefraoui	Master student	Dept of Exp Surgery	McGill University	2019-2020
Uyen Do	Master student	Dept of Exp Surgery	McGill University	2019-2020
Tharaniya Vallipuram	Medical student	-	McGill University	2019-2020
Andrew Miller	Medical student	-	McGill University	Fall 2019

Student Course Project Leader:

Thinking with Data	Undergraduate	Dept Comp Science	University of Calgary	2017
Human Computer Int.	Undergraduate	Dept Comp Science	University of Calgary	2015
Microprocessors	Undergraduate	Dept ECE	University of Tehran	2009

Invited Talks

- 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 & 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?
- Human Factors Interest Group, University of Toronto** April 2018
Title: Designing and Developing Tools to Enhance Patient-Physician Communication - [Link](#)
- Ward of the 21st Century Symposium, Alberta Health Services** October 2015
Title: WEST: Visualizing non-Emergency Surgery Waiting Times

Knowledge and Technology Transfer

- MyCareCompass** - under development [Link](#) 2018 - present
MyCareCompass is the first platform designed for patients with chronic conditions in Alberta to manage their care. My Ph.D. research studies and my data visualization designs are incorporated into this platform.

Software Development and Design

- WEST: Visualizing Surgery Waiting Time** [Link](#) - [Video](#) 2015
WEST is an interactive visualization tool displaying surgery waiting times across British Columbia. This project is motivated by the long waiting time for surgeries in BC.
- Leitner System App** [Link](#) 2014
Leitner app is designed to help people memorize flashcards bearing information as words or numbers. This app employs the Leitner system, repetition, where cards are reviewed at the increasing interval.

International collaborations

- Research Collaborator, Oxford Brookes University, United Kingdom** 2019 - 2020
Centre for Movement, Occupational and Rehabilitation Science with Dr. Mansoubi and Dr. Shelly Coe.
- Research Collaborator, Indiana University, United States** 2015 - 2017
Dr. Haley Macleod.

Academic Services

- Program Committee**
Graphics Interface Conference - Strategy Planning Committee 2020 - 2021
IEEE Information Visualization (InfoVis) Conference 2020, 2021 - Short Papers

McGill University Health Center Injury, Repair, Recovery Annual Research Day 2020 - Posters
McGill University Experimental Surgery Research Day 2019 - Best Poster Award
ACM Intelligent User Interfaces (IUI) Conference 2019 - 2021 - Short and Long Paper
ACM Intelligent User Interfaces (IUI) Conference 2015 - Best Poster Award

Conference Chair

ACM Interactive Surfaces and Spaces (ISS) Conference 2021 - Poster Chair
ACM Interactive Surfaces and Spaces (ISS) Conference 2019 - Video Preview Chair
ACM Interactive Surfaces and Spaces (ISS) Conference 2016 - Mobile App Chair

Conference Paper Reviewer

UIST 2021, GI 2021, AMIA 2017 - 2021, DIS 2018 - 2019, CHI 2016 - 2020, TEI 2017, IUI 2016, CSCW 2016, ISS 2015

Journal Paper Reviewer

Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) Journal (2 articles)
Value in Health Journal (1 article)