MATTHEW BREHMER

CURRICULUM VITAE — 2022

CONTACT

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I am a human-computer interaction (HCI) researcher specializing in data visualization. I design, implement, and evaluate new interactive experiences for communicating and collaborating around representations of data.

EDUCATION

DOCTOR OF PHILOSOPHY, COMPUTER SCIENCE — 2011 – 2016

University of British Columbia (UBC), Vancouver, Canada
SUPERVISORY COMMITTEE: Tamara Munzner (UBC CS), Joanna McGrenere (UBC CS), Ronald Rensink (UBC Psychology)

MASTER OF SCIENCE, COMPUTER SCIENCE — 2009 – 2011

Specialization in Human-Computer Interaction
University of British Columbia, Vancouver, Canada
SUPERVISORY COMMITTEE: Joanna McGrenere (UBC CS), Claudia Jacova (UBC Medicine)

BACHELOR OF COMPUTING — 2004 – 2009

Specialization in Cognitive Science with Professional Internship
Queen's University, Kingston, Canada

EMPLOYMENT EXPERIENCE

Senior Research Staff — SINCE 2020
Research Scientist — 2019 – 2020

Tableau (a Salesforce Company), Seattle, USA
Prototyped new experiences for communicating around data, from generative visualization design inspiration (TVCG-22a) to presenting data in augmented reality video (UIST-22); led customer research on synchronous communication around data (TVCG-22b); advised research interns; consulted with product teams regarding visualization authoring experiences.

Postdoctoral Researcher — 2016 – 2019

Microsoft Research, Redmond, USA
Developed and deployed Timeline Storyteller (C+J-19), a narrative visualization application for the web and Power BI; conducted quantitative crowdsourced research experiments involving interactive data visualization on mobile devices (TVCG-20a, TVCG-19a); consulted with product and outreach teams, including Microsoft's Data Journalism Team.

Graduate Research Assistant — 2009 – 2016

University of British Columbia Department of Computer Science, Vancouver, Canada
Applied theories and methods from human-computer interaction (HCI) to the design and evaluation of information visualization tools (T-16) in the domains of journalism (TVCG-14) and energy conservation (TVCG-16a); designed and conducted mixed-methods research studies pertaining to the design of a self-administered computerized cognitive testing application (CHI-12, T-11).

PhD Research Intern — 2015

Microsoft Research, Redmond, USA
Developed a web-based interactive timeline visualization tool incorporating animation and annotation (TVCG-17).

Mitacs Accelerate PhD Research Intern — 2013 – 2014

Pulse Energy (now a division of Enel X, formerly EnerNOC), Vancouver, Canada
Conducted human-centred visualization research and development while embedded in the product development team of a commercial energy analytics startup; developed an interactive energy portfolio visualization dashboard application (TVCG-16a).

Graduate Teaching Assistant — 2009 – 2011

University of British Columbia Department of Computer Science, Vancouver, Canada
Led tutorial sessions, contributed to curriculum development, supervised group projects, and marked deliverables / tests for two senior-level undergraduate courses in HCI.

Research Assistant — 2009

Queen's University School of Computing, Kingston, Canada
Developed GAIM (FP-10), a device-agnostic toolkit for exercise video game development, one that allows people with different input peripherals to play together.

User Experience Design / Development Intern — 2007 – 2008

EMC Corporation (now Dell EMC), Toronto, Canada
Performed requirements analysis, user interface design, and front-end development for a rich media content management web application for the automotive sector.

Information Technology Staff / Web Developer — 2006

Killam Properties, Inc., Halifax, Canada
Maintained and updated web content for a regional residential property management company.

PUBLICATIONS

icons link to author copies / pre-prints, which are also provided at mattbrehmer.ca/#pubs.
My current H index is 19 (GOOGLE SCHOLAR, NOV. 2022). Legend: * = student intern, AR = acceptance rate, CC = citation count.

PEER-REVIEWED JOURNAL AND CONFERENCE PAPERS

Augmented Chironomia for Presenting Data to Remote Audiences — UIST-22
Brian D. Hall*, Lyn Bartram, & **Matthew Brehmer**.
In Proceedings of the *ACM Symposium on User Interface Software and Technology* (UIST 2022). AR: 26%
ACM UIST BEST PAPER HONORABLE MENTION AWARD

Generative Design Inspiration for Glyphs with Diatoms — TVCG-22A
Matthew Brehmer, Robert Kosara, & Carmen Hull*.
In Vol. 28-1 (2022) *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS 2021). AR: 26% CC: 5

From Jam Session to Recital: Synchronous Communication & Collaboration Around Data in Organizations — TVCG-22B
Matthew Brehmer & Robert Kosara.
In Vol. 28-1 (2022) *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS 2021). AR: 26% CC: 7

QualDash: Adaptable Generation of Visualisation Dashboards for Healthcare Quality Improvement — TVCG-21
Mai Elshehaly, Rebecca Randell, **Matthew Brehmer**, Lynn McVey, Natasha Alvarado, Chris P. Gale, & Roy A. Ruddle.
In Vol. 27-2 (2021) of *IEEE Transactions on Visualization & Computer Graphics* (IEEE VIS 2020). CC: 20

Orchard: Exploring Multivariate Heterogeneous Networks on Mobile Phones — CGF-20
Philipp Eichmann*, Darren Edge, Nathan Evans, Bongshin Lee, **Matthew Brehmer**, & Christopher White.
In Vol. 29-3 (2020) of *Computer Graphics Forum* (EuroVis 2020). CC: 9

A Comparative Evaluation of Animation & Small Multiples for Trend Visualization on Mobile Phones — TVCG-20A
Matthew Brehmer, Bongshin Lee, Petra Isenberg, & Eun Kyoung Choe.
In Vol. 26-1 (2020) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2019). AR: 26% CC: 48

Critical Reflections on Visualization Authoring Systems — TVCG-20B
Arvind Satyanarayan, Bongshin Lee, Donghao Ren, Jeffrey Heer, John Stasko, John R. Thompson, **Matthew Brehmer**, and Zhicheng Liu.
In Vol. 26-1 (2020) of *IEEE Transactions on Visualization & Computer Graphics* (IEEE VIS / InfoVis 2019). AR: 26% CC: 63

Thumbnails for Data Stories: A Survey of Current Practices — VIS-19
Hwiyeon Kim, Juyoung Oh, Yunha Han, Sungahn Ko, **Matthew Brehmer**, & BC Kwon.
In *Short Paper Proceedings of IEEE VIS 2019*. AR: 32% CC: 7

Inking Your Insights: Investigating Digital Externalization Behaviors During Data Analysis — ISS-19
Yea-Seul Kim*, Nathalie Henry Riche, Bongshin Lee, **Matthew Brehmer**, Michel Pahud, Ken Hinckley, & Jessica Hullman.
In *Proceedings of the 2019 ACM Conference on Interactive Surfaces & Spaces* (ISS). CC: 12

DataToon: Drawing Dynamic Network Comics With Pen + Touch Interaction — CHI-19
Nam Wook Kim*, Nathalie H. Riche, Benjamin Bach, Guanpeng A. Xu, **Matthew Brehmer**, Ken Hinckley, Michel Pahud, Haijun Xia, Michael McGuffin, & Hanspeter Pfister.
In *Proceedings of the 2019 ACM Conference on Human Factors in Computing Systems* (CHI). AR: 24% CC: 49

Timeline Storyteller: The Design & Deployment of an Interactive Authoring Tool for Expressive Timeline Narratives — C+J-19
Matthew Brehmer, Bongshin Lee, Nathalie H. Riche, David Tittsworth, Kate Lytvynets, Darren Edge, & Christopher White.
Proceedings of the 2019 Computation + Journalism Symposium. CC: 13

Visualizing Ranges over Time on Mobile Phones: A Task-Based Crowdsourced Evaluation — TVCG-19A
Matthew Brehmer, Bongshin Lee, Petra Isenberg, & Eun Kyoung Choe.
In Vol. 25-1 (2019) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2018). AR: 25% CC: 46

Charticulator: Interactive Construction of Bespoke Chart Layouts TVCG-19B
Donghao Ren*, Bongshin Lee, & **Matthew Brehmer**.
In Vol. 25-1 (2019) of *IEEE Transactions on Visualization & Computer Graphics* (IEEE VIS / InfoVis 2018). AR: 25% CC: 89
IEEE INFOVIS BEST PAPER HONORABLE MENTION AWARD

What's the Difference? Evaluating Variants of Multi-Series Bar Charts for Visual Comparison Tasks CHI-18
Arjun Srinivasan*, **Matthew Brehmer**, Bongshin Lee, & Steven Drucker.
In *Proc. of the 2018 ACM Conference on Human Factors in Computing Systems* (CHI). AR: 26% CC: 29

PEER-REVIEWED JOURNAL AND CONFERENCE PAPERS (CONT.)

Timelines Revisited: A Design Space & Considerations for Expressive Storytelling TVCG-17
Matthew Brehmer, Bongshin Lee, Benjamin Bach, Nathalie H. Riche, and Tamara Munzner.
In Vol. 23-9 (2017) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS 2017).
CC: 178

ChartAccent: Annotation for Data-Driven Storytelling PVIS-17
Donghao Ren, **Matthew Brehmer**, Bongshin Lee, Tobias Höllerer, and Eun Kyoung Choe.
In *Proc. of the 2017 IEEE PacificVis Symposium*. CC: 98

Matches, Mismatches, & Methods: Multiple-View Workflows for Energy Portfolio Analysis TVCG-16A
Matthew Brehmer, Jocelyn Ng, Kevin Tate, & Tamara Munzner.
In Vol. 22-1 (2016) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2015). AR: 21% CC: 38

TimeLineCurator: Interactive Authoring of Visual Timelines from Unstructured Text TVCG-16B
Johanna Fulda, **Matthew Brehmer**, & Tamara Munzner.
In Vol 22-1 (2016) of *IEEE Transactions on Visualization & Computer Graphics* (IEEE VIS / VAST 2015). CC: 81

C-TOC (Cognitive Testing on Computer): Investigating the Usability & Validity of a Novel Self-administered Cognitive Assessment Tool in Aging & Early Dementia ADAD-15
Claudia Jacova, Joanna McGrenere, Hyunsoo S. Lee, William Wang, Sarah Le Huray, Emily F. Corenblith, **Matthew Brehmer**, Charlotte Tang, Sherri Hayden, B. Lynn Beattie, & Ging-Yuek R. Hsiung.
In *Alzheimer Disease & Associated Disorders (July 2015)*. CC: 17

Overview: The Design, Adoption, & Analysis of a Visual Document Mining Tool For Investigative Journalists TVCG-14
Matthew Brehmer, Stephen Ingram, Jonathan Stray, & Tamara Munzner.
In Vol. 20-12 (2014) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2014). AR: 23% CC: 125

A Multi-Level Typology of Abstract Visualization Tasks TVCG-13
Matthew Brehmer & Tamara Munzner.
In Vol. 19-12 (2013) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2013). AR: 25% CC: 685
THE MOST CITED IEEE INFOVIS PAPER SINCE 2013.

Investigating Interruptions in the Context of Computerized Cognitive Testing for Older Adults CHI-12
Matthew Brehmer, Joanna McGrenere, Charlotte Tang, & Claudia Jacova.
In *Proc. of the 2012 ACM Conference on Human Factors in Computing Systems* (CHI). AR: 23% CC: 13

The Haptic Crayola Effect: Exploring the Role of Naming in Learning Haptic Stimuli WHC-11
Inwook Hwang, Karon MacLean, **Matthew Brehmer**, Jeff Hendy, Andreas Sotirkopoulos, & Seungmoon Choi.
In *Proc. of the 2011 IEEE World Haptics Conference*. CC: 13

Activate Your GAIM: A Toolkit for Input in Active Games FP-10
Matthew Brehmer, Nicholas Graham, & Tadeusz Stach.
In *Proc. of the 2010 ACM Future Play Conference*. CC: 14

Classifying Input for Active Games ACE-09
Tadeusz Stach, Nicholas Graham, **Matthew Brehmer** & Andreas Hollatz.
In *Proc. of the 2009 ACM Conference on Advances in Computer Entertainment Technology* (ACE). CC: 28

PEER-REVIEWED WORKSHOP PAPERS

Reflecting on the Evaluation of Visualization Authoring Systems BELIV-18
Donghao Ren, Bongshin Lee, **Matthew Brehmer**, & Nathalie H. Riche.
In the *Proc. of the 2018 BELIV Workshop: Evaluation & Beyond – Methodological Approaches for Visualization*
CC: 31.

Data Visualization on Mobile Devices CHI-EA-18
Bongshin Lee, **Matthew Brehmer**, Eun Kyoung Choe, Petra Isenberg, Ricardo Langer, & Raimund Dachselt.
In *Extended Abstract Proc. of the 2018 ACM Conference on Human Factors in Computing Systems (CHI)* CC: 26.

Visualizing Dimensionally-Reduced Data: Interviews with Analysts & a Characterization of Task Sequences BELIV-14A
Matthew Brehmer, Michael Sedlmair, Stephen Ingram, & Tamara Munzner.
In *Proc. of the 2014 ACM BELIV Workshop: Beyond Time & Errors – Novel Evaluation Methods for Visualization* CC: 96.

Pre-Design Empiricism for Information Visualization: Scenarios, Methods, & Challenges BELIV-14B
Matthew Brehmer, Sheelagh Carpendale, Bongshin Lee, & Melanie Tory.
In *Proc. of the 2014 ACM BELIV Workshop: Beyond Time & Errors – Novel Evaluation Methods for Visualization* CC: 34.

BOOK CHAPTERS

Interacting with Visualization on Mobile Devices MDV-21A
Matthew Brehmer, Bongshin Lee, John Stasko, & Christian Tominski.
To appear in *Mobile Data Visualization*, edited by B. Lee, R. Dachselt, P. Isenberg, E. K. Choe (CRC Press, 2021). CC: 1

Responsive Visualization Design for Mobile Devices MDV-21B
Tom Horak, Wolfgang Aigner, **Matthew Brehmer**, Alark Joshi, & Christian Tominski.
To appear in *Mobile Data Visualization*, edited by B. Lee, R. Dachselt, P. Isenberg, E. K. Choe (CRC Press, 2021). CC: 1

Evaluating Data-Driven Stories & Storytelling Tools DDS-18
Fereshteh Amini°, **Matthew Brehmer**° (contributed equally), Gordon Bolduan, Christina Elmer, & Benjamin Wiederkehr.
In *Data-Driven Storytelling*, edited by S. Carpendale, N. Diakopoulos, C. Hurter, N. H. Riche (CRC Press, 2018) CC: 14.

OTHER PUBLICATIONS: TECHNICAL REPORTS, POSTERS, THESES

Demonstrating the Value of Visualization: Highlights from the 2017 PacificVis Visual Data Storytelling Contest VIS-17
Matthew Brehmer, Kyungwon Lee, Ivan Viola, Jinwook Seo, & Bongshin Lee.
In *Poster Proceedings of the 2017 IEEE VIS Conference*.

Why Visualization? Task Abstraction for Analysis & Design T-16
Matthew Brehmer.
University of British Columbia PhD Dissertation (2016). CC: 6

Dimensionality Reduction in the Wild: Gaps & Guidance TR-2012
Michael Sedlmair, **Matthew Brehmer**, Stephen Ingram, & Tamara Munzner.
University of British Columbia Technical Report TR-2012-03 (2012) CC: 53.

Usability & the Effects of Interruption in C-TOC: Self-Administered Cognitive Testing on a Computer T-11
Matthew Brehmer.
University of British Columbia MSc Thesis (2011) CC: 3.

A Tale of Two Studies: Investigating the Impact of Interruptions on Task Performance in Older Adults GRAND-11
Matthew Brehmer, Charlotte Tang, Joanna McGrenere, & Claudia Jacova.
In the *Work-In-Progress Proceedings of the the 2011 GRAND NCE AGM*.

Assessing the Effect of Exercise Intensity on Cognitive Task Performance in an Exercise Video Game T-09
Matthew Brehmer.
Queen's University B.Comp Honours Project (2009).

PATENTS

Applying a Visual Analytics Intent Language to Generate Data Visualizations P-2022
Vidya Setlur, Scott Sherman, & **Matthew Brehmer**.
US11409763. Issued 2022-08-09.

Glyph Scaffolds for Generating Unique Glyphs to Use as Data Marks in Data Visualizations P-2021B
Matthew Brehmer, Robert Kosara, & Carmen Hull*.
US11210825. Issued 2021-12-28.

Interactive Layout-Aware Construction of Bespoke Charts P-2021A
Bonsghin Lee, **Matthew Brehmer**, & Donghao Ren*.
US011080914B2. Issued 2021-08-03.

TALKS

Slides and videos available at mattbrehmer.ca/#talks. ▶ icons link to the corresponding video.

New Multimodal Experiences for Communicating with an Audience about Data 2022 / 10 / 05
University of Utah Scientific Computing and Imaging Institute (Virtual)

New Experiences for Communicating with an Audience About Data 2022 / 10 / 03
Maryland Institute College of Art (MICA) Data Analytics and Visualization Program (Virtual)

▶ **Generative Design Inspiration for Glyphs with Diatoms** 2021 / 10 / 29
IEEE VIS 2021 (Virtual)

▶ **From Jam Session to Concert Hall** 2021 / 10 / 27
IEEE VIS 2021 (Virtual, with Robert Kosara)

New Perspectives on Communicating with Visualization 2021 / 10 / 08
University of Waterloo (Waterloo, Canada)

▶ **The Information in Our Hands** 2021 / 09 / 30
Information+ Conference 2021 (Virtual)

Interactive Tools for Visualizing Data: Perspectives from Research + Practice 2021 / 02 / 10
University of Victoria – Information Visualization – Guest Speaker Series (Virtual)

▶ **Interactive Tools for Visualizing Data: Perspectives from Research + Practice** 2020 / 06 / 24
University of Edinburgh's online course for DataVis professionals (Virtual)

▶ **See & Understand Networks** 2019 / 11 / 13
Tableau Conference (Las Vegas, USA, with Scott Sherman)

▶ **An Evaluation of Animation & Small Multiples for Trend Visualization on Mobile Phones** 2019 / 10 / 23
IEEE VIS / InfoVis 2019 (Vancouver, Canada)

Crowdsourced Evaluation for Mobile Vis 2019 / 07 / 17
Mobile Data Visualization Dagstuhl Seminar (Wadern, Germany)

Expressive Visualization Tools for Data-Driven Storytelling 2019 / 05 / 30
ASA Symposium on Data Science & Statistics (SDSS) (Bellevue, USA)

Visualizing Quantities & Events Over Time 2019 / 04 / 25
Chatham Labs (Toronto, Canada)

Constraints & Opportunities for Expressive Information Design 2019 / 04 / 09
Tableau Research (Seattle, USA)

Visualizing Information on Mobile Phones 2019 / 03 / 13
Microsoft Research (Redmond, USA)

Constraints & Opportunities for Expressive Information Design 2019 / 03 / 01
Uncharted Software (Toronto, Canada)

Considerations for Interactive & Expressive Information Design Tools 2019 / 02 / 27
University of Ontario Institute of Technology (Oshawa, Canada)

Considerations for Interactive & Expressive Information Design Tools 2019 / 02 / 26
Autodesk Research (Toronto, Canada)

▶ **Timeline Storyteller: An Authoring Tool for Expressive Timeline Narratives** 2019 / 02 / 02
The Computation + Journalism Symposium (Coral Gables, USA)

Constraints & Opportunities for Expressive Information Design 2019 / 01 / 28
Simon Fraser University School of Interactive Arts & Technology (Surrey, Canada)

▶ **Visualizing Ranges over Time on Mobile Phones** 2018 / 10 / 24
IEEE VIS / InfoVis 2018 (Berlin, Germany)

Tools for Expressive Information Visualization Design 2018 / 08 / 01
Microsoft Vancouver Data Visualization Symposium (Vancouver, Canada)

Timeline Storyteller, from Visualization Design Space to Deployment 2018 / 06 / 18
Data Empowerment Speaker Series (University of Calgary, Canada)

Data-Driven Storytelling at Microsoft 2017 / 10 / 24
UBC School of Journalism, Topics in Contemporary Journalism: Data Viz (JRNL 520H) (Vancouver, Canada)

Timelines Revisited: Considerations for Expressive Storytelling — 2017 / 10 / 03
IEEE VIS 2017 (Phoenix, USA)

Expressive Storytelling With Timelines — 2017 / 08 / 31
Uber Visualization Night: A Journey Through Space & Time (Seattle, USA)

Timelines Revisited: Considerations for Expressive Storytelling — 2017 / 07 / 11
King's College London Department of Informatics (London, UK)

Timelines Revisited: Considerations for Expressive Storytelling — 2017 / 07 / 10
City University London giCentre (London, UK)

TALKS (CONT.)

The Timeline Storyteller Custom Visual for Power BI — 2017 / 06 / 13
Microsoft Data Insights Summit BI Power Hour (Seattle, USA)

What Story Does Your Timeline Tell? — 2017 / 04 / 24
OpenVisConf 2017 (Boston, USA)

Timelines Revisited: Considerations for Expressive Storytelling — 2016 / 12 / 08
Radcliffe Institute at Harvard University (Cambridge, USA)

Why Visualization? Task Abstraction for Analysis & Design — 2016 / 03 / 23
Dissertation Defence (Vancouver, Canada)

Storytelling with Timeline Data — 2016 / 02 / 11
Data-Driven Storytelling Dagstuhl Seminar (Wadern, Germany)

Why Visualization? Task Abstraction for Analysis & Design — 2016 / 02 / 01
Microsoft Research (Redmond, USA)

Matches, Mismatches, & Methods: Workflows for Energy Portfolio Analysis — 2015 / 10 / 28
IEEE VIS / InfoVis 2015 (Chicago, USA)

Multiple-View Workflows for Energy Portfolio Analysis — 2015 / 09 / 04
University of Washington (Seattle, USA)

The Future of Data & Design … In Visualization Research — 2015 / 05 / 19
Vancouver Data Visualization Meetup (Vancouver, Canada)

Overview: The Design, Adoption, & Analysis of a Visual Document Mining Tool For Investigative Journalists — 2014 / 11 / 14
IEEE VIS / InfoVis 2014 (Paris, France)

Visualizing Dimensionally-Reduced Data: Interviews with Analysts & a Characterization of Task Sequences — 2014 / 11 / 10
ACM BELIV 2014 (Paris, France)

Pre-Design Empiricism for Information Visualization — 2014 / 11 / 10
ACM BELIV 2014 (Paris, France)

Visualization Task Abstraction from Multiple Perspectives — 2014 / 11 / 08
IEEE VIS Doctoral Colloquium 2014 (Paris, France)

A Multi-Level Typology of Abstract Visualization Tasks — 2013 / 10 / 15
IEEE VIS / InfoVis 2013 (Atlanta, USA)

Investigating Interruptions in the Context of Computerized Cognitive Testing for Older Adults — 2012 / 05 / 10
ACM CHI 2012 (Austin, USA)

The Impact of Interruptions on Task Performance in Older Adults — 2011 / 05 / 14
GRAND NCE AGM 2011 (Vancouver, Canada)

PANELS

Visualization in Context — 2022 / 01 / 24
Data Visualization Society Fireside Chat (Virtual, with K. Wu, F. Elavsky, and A. Makulec)

Writing About Visualization — 2021 / 10 / 25
VisInPractice @ IEEE VIS 2021 (Virtual, with M. Aviles, T. Alocci, P. Zagami, C. Miles, and D. Szafir)

Visualization Consulting & Freelancing — 2020 / 10 / 26
VisInPractice @ IEEE VIS 2020 (Virtual, with J. Zhang, K. Henry, and C. Kelleher)

DEMONSTRATIONS

Augmented Chironomia for Presenting Data to Remote Audiences — 2022 / 10 / 31
ACM Symposium on User Interface Software and Technology / UIST 2022 (Bend, USA)

Tilt & Pose-Based Gesture Interaction — 2019 / 03 / 04
Microsoft TechFest 2019 (Redmond, USA)

Timeline Storyteller — 2019 / 02 / 01
The Computation + Journalism Symposium (Coral Gables, USA)

Charticulator — 2018 / 12 / 01
Tapestry Conference 2018 (Coral Gables, USA)

Timeline Storyteller — 2017 / 03 / 09
Microsoft Research Week (Redmond, USA)

Timeline Storyteller — 2017 / 03 / 01
Tapestry Conference 2017 (St. Augustine, USA)

SERVICE

SOCIETY COMMITTEES

IEEE VIS Executive Committee (VEC)	2022 – 2026
IEEE Computer Society Visualization and Graphics Technical Community Executive Committee (Publications Chair)	2022 – 2025
Data Visualization Society Board of Directors Nomination Committee	2020 – 2021

ORGANIZING COMMITTEES

IEEE VIS (Co-Chair, VisInPractice)	2018 – 2021
IEEE VIS (Member, Committee to Attract & Retain Practitioners to VIS)	2019
ACM CHI Workshop on Data Visualization on Mobile Devices (Co-Organizer)	2018
IEEE Pacific Visualization Symposium (Co-Chair, Visual Data Storytelling Contest)	2017, 2018

PROGRAM COMMITTEES

IEEE Conference on Visualization & Visual Analytics (VIS)	2021, 2022
Information+ Conference	2018, 2021
IEEE Conference on Information Visualization (VIS / InfoVis)	2017 – 2019
Computation + Journalism (C+J)	2019
VISAP: The IEEE VIS Arts Program	2018
BELIV: Evaluation & Beyond – Methodological Approaches for Visualization	2018, 20, 22
IEEE Pacific Visualization Symposium (PacificVis)	2017, 2018
ACM FAT*: Fairness, Accountability, Transparency (HCI / Visualization Track)	2018
The Art of Networks III	2018
EuroGraphics / VGTC Conf. on Visualization (EuroVis) State of the Art Reports	2017

REVIEWING

ACM Symposium on User Interface Software and Technology (UIST)	2022
ACM Conference on Human Factors in Computing Systems (CHI)	2013 – 2022
EuroGraphics / VGTC Conference on Visualization (EuroVis)	2014 – 2022
IEEE Transactions on Visualization & Computer Graphics (TVCG)	2015 – 2022
SAGE Information Visualization Journal	2015 – 2021
IEEE Conference on Information Visualization (VIS / InfoVis)	2013 – 16, 20
ACM Conference on Designing Interactive Systems (DIS)	2020
ACM Conference on Computer-Supported Collaborative Work (CSCW)	2020
IEEE Pacific Visualization Symposium (PacificVis)	2017, 2019
ACM Conference on Creativity & Cognition (C&C)	2019
IEEE Conference on Visual Analytics Science & Technology (VAST)	2015
ACM Transactions on Computer-Human Interaction (TOCHI)	2013
ACM SIGGRAPH Asia	2012

INVITED WORKSHOP, CONSORTIUM, SEMINAR PARTICIPATION

IEEE VIS 2021 Doctoral Colloquium (Invited Panelist)	2021
Schloss Dagstuhl Seminar on Mobile Data Visualization	2019
BIRS Workshop on Restructuring IEEE VIS For the Future	2018
Harvard University / Sloan Foundation Timeline Consortium	2016, 17, 18
Schloss Dagstuhl Seminar on Data-Driven Storytelling	2016
ACM Beyond Time & Errors (BELIV) Workshop	2014
VACCINE / UCSD Workshop on the Evaluation of Visual Analytics	2014

STUDENT VOLUNTEERING

ACM Conference on Human Factors in Computing Systems (CHI)	201{1,3,5,6}

UNIVERSITY SERVICE

UNIVERSITY OF BRITISH COLUMBIA DEPARTMENT OF COMPUTER SCIENCE

Graduate Admissions & Recruitment Committee	2013 – 2015
Guest Lecturer (CPSC 547: Information Visualization)	2014 – 2017
Curriculum Development (CPSC 444: Advanced HCI Methods)	2010 – 2011
Teaching Assistant (CPSC 444: Advanced Human Computer Interaction Methods)	2010
Teaching Assistant (CPSC 344: Introduction to Human Computer Interaction Methods)	2009

UNIVERSITY OF BRITISH COLUMBIA COMPUTER SCIENCE GRADUATE STUDENT ASSOCIATION

Vice President, Social Affairs	2010 – 2011
Co-Organizer, The Un-Distinguished Lecture Series	2010 – 2013

QUEENS UNIVERSITY COMPUTING STUDENT ASSOCIATION

Orientation Leader	2005
First-Year Representative	2004 – 2005

AWARDS

PROJECT RECOGNITION

ACM UIST Conference: Best Paper Honorable Mention for UIST 22 (Augmented Chironomia)	2022
IEEE InfoVis Conference: Best Paper Honorable Mention for TVCG19b (Charticulator)	2018
Kantar Information is Beautiful Awards Shortlist (Charticulator)	2018

SERVICE RECOGNITION

University of British Columbia Dept. Computer Science Student Service Award	2016
University of British Columbia Dept. Computer Science Volunteering Award	2015

SCHOLARSHIPS

University of British Columbia Four Year Doctoral Fellowship	2011 – 2015
Natural Sciences & Engineering Research Council (NSERC) Postgraduate Scholarship	2011 – 2014
NSF IEEE VIS Doctoral Colloquium Travel Award	2014
Mitacs-Accelerate Research Internship Award	2013 – 2014
University of British Columbia Dept. Computer Science Merit Scholarship	2009 – 2011
Queen's University Dean's Entrance Scholarship in Computing	2004 – 2005