

MATTHEW BREHMER

CV — NOV. 2021

CONTACT

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REFERENCES

Dr. Tamara Munzner
PROFESSOR,
COMPUTER SCIENCE,
UNIV. BRITISH COLUMBIA
tmm@cs.ubc.ca
+1-604-827-5200

Dr. Bongshin Lee
SENIOR RESEARCHER,
MICROSOFT
bongshin@microsoft.com
+1-425-704-0779

Dr. Petra Isenberg
RESEARCH SCIENTIST,
AVIZ RESEARCH GROUP,
INRIA SACLAY
petra.isenberg@inria.fr
+33-1-74-85-42-90

I am a visualization and human-computer interaction (HCI) researcher, specializing in creative expression with data for communication and presentation, the visualization of time-oriented data, and interacting with data beyond the desktop.

EXPERTISE

VISUALIZATION, INTERFACE, AND INTERACTION DESIGN

Designing and developing dynamic, interactive, and multimodal techniques and tools for presenting and analyzing data.

QUALITATIVE HUMAN FACTORS RESEARCH

Pre-design empiricism via observational studies, retrospective interviews, and design probes; summative think-aloud usability evaluations; data analysis via thematic coding and affinity diagramming.

QUANTITATIVE HUMAN FACTORS RESEARCH

Experimental design for laboratory- and web-based experiments to evaluate graphical perception and interaction design; descriptive and inferential statistics: analysis of variance, estimations of effect size.

EDUCATION

DOCTOR OF PHILOSOPHY, COMPUTER SCIENCE

2011 - 2016

University of British Columbia (UBC), Vancouver, Canada

THESIS: *Why Visualization? Task Abstraction for Analysis & Design*

SUPERVISORS: T. Munzner (UBC CS), J. McGrenere (UBC CS), R. Rensink (UBC Psychology)

MASTER OF SCIENCE, COMPUTER SCIENCE

2009 - 2011

Specialization in Human-Computer Interaction

University of British Columbia (UBC), Vancouver, Canada

THESIS: *Usability & the Effects of Interruption in C-TOC: Self-Administered Cognitive Testing on a Computer*

SUPERVISORS: J. McGrenere (UBC CS), C. Jacova (UBC Medicine)

BACHELOR OF COMPUTING

2004 - 2009

Specialization in Cognitive Science with Professional Internship

Queen's University, Kingston, Canada

THESIS: *Assessing the Effect of Exercise Intensity on Cognitive Task Performance in an Exercise Video Game*

EMPLOYMENT EXPERIENCE

Senior Research Staff

2019 - PRESENT

Tableau / Salesforce
Seattle, USA

Postdoctoral Researcher

2016 - 2019

Microsoft Research
Redmond, USA

Graduate Research Assistant

2009 - 2016

University of British Columbia Department of Computer Science
Vancouver, Canada

Graduate Research Intern

2015

Microsoft Research
Redmond, USA

Mitacs Graduate Research Intern

2013 - 2014

Pulse Energy (now a division of Enel X, formerly EnerNOC)
Vancouver, Canada

Graduate Teaching Assistant

2009 - 2011

University of British Columbia Department of Computer Science
Vancouver, Canada

Research Assistant

2009

Queen's University School of Computing
Kingston, Canada

User Experience Design / Development Intern

2007 - 2008

EMC Corporation (now Dell EMC)
Toronto, Canada

Information Technology Staff / Web Developer

2006

Killam Properties, Inc.
Halifax, Canada


PUBLICATIONS

Author copies of these publications are available at mattbrehmer.ca#pubs.

My current h index is 18 (GOOGLE SCHOLAR, NOV. 2021): AR = acceptance rate, H = H5 index, CC = citation count.

PEER-REVIEWED JOURNAL AND CONFERENCE PAPERS

- Generative Design Inspiration for Glyphs with Diatoms** TVCG22a
Matthew Brehmer, Robert Kosara, & Carmen Hull.
To appear in *IEEE Transactions on Visualization & Computer Graphics*
(Appeared at IEEE VIS 2021). AR: 26% H: 82
- From Jam Session to Recital:** TVCG22b
Synchronous Communication & Collaboration Around Data in Organizations
Matthew Brehmer & Robert Kosara.
To appear in *IEEE Transactions on Visualization & Computer Graphics*
(Appeared at IEEE VIS 2021). AR: 26% H: 82 CC: 1
- QualDash:** TVCG21
Adaptable Generation of Visualisation Dashboards for Healthcare Quality Improvement
Mai Elshehaly, Rebecca Randell, Matthew Brehmer, Lynn McVey, Natasha Alvarado, Chris P. Gale, & Roy A. Ruddle.
In Volume 27, Issue 2 (Feb. 2021) of *IEEE Transactions on Visualization & Computer Graphics*
(Appeared at IEEE VIS 2020). H: 82 CC: 5
- Orchard: Exploring Multivariate Heterogeneous Networks on Mobile Phones** CGF20
Philipp Eichmann, Darren Edge, Nathan Evans, Bongshin Lee, Matthew Brehmer, & Christopher White.
In Volume 29, Issue 3 (2020) of *Computer Graphics Forum* (Appeared at EuroVis 2020). H: 60 CC: 58
- A Comparative Evaluation of Animation & Small Multiples for Trend Visualization on Mobile Phones** TVCG20a
Matthew Brehmer, Bongshin Lee, Petra Isenberg, & Eun Kyoung Choe.
In Volume 26, Issue 1 (Jan. 2020) of *IEEE Transactions on Visualization & Computer Graphics*
(Presented at IEEE VIS 2019). H: 82 AR: 26% CC: 30
- Critical Reflections on Visualization Authoring Systems** TVCG20b
Arvind Satyanarayan, Bongshin Lee, Donghao Ren, Jeffrey Heer, John Stasko, John R. Thompson, Matthew Brehmer, and Zhicheng Liu.
In Volume 26, Issue 1 (Jan. 2020) of *IEEE Transactions on Visualization & Computer Graphics*
(Appeared at IEEE VIS 2019). H: 82 AR: 26% CC: 43
- Inking Your Insights: Investigating Digital Externalization Behaviors During Data Analysis** ISS19
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: 8
- Thumbnails for Data Stories: A Survey of Current Practices** VIS19
Hwiyeon Kim, Juyoung Oh, Yunha Han, Sungahn Ko, Matthew Brehmer, & BC Kwon.
In *Short Paper Proceedings of IEEE VIS 2019*. AR: 32% H: 11 CC: 5
- DataToon: Drawing Dynamic Network Comics With Pen + Touch Interaction** CHI19
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)*.
H: 101 AR: 24% CC: 34
- Timeline Storyteller:** C+J19
The Design & Deployment of an Interactive Authoring Tool for Expressive Timeline Narratives
Matthew Brehmer, Bongshin Lee, Nathalie H. Riche, David Tittsworth, Kate Lytvynets, Darren Edge, & Christopher White.
Proceedings of the 2019 Computation + Journalism Symposium. CC: 8
- Visualizing Ranges over Time on Mobile Phones:** TVCG19a
A Task-Based Crowdsourced Evaluation
Matthew Brehmer, Bongshin Lee, Petra Isenberg, & Eun Kyoung Choe.
In Volume 25, Issue 1 (Jan. 2019) of *IEEE Transactions on Visualization & Computer Graphics*
(Presented at IEEE VIS 2018). H: 82 AR: 25% CC: 37
- Charticulator: Interactive Construction of Bespoke Chart Layouts** TVCG19b
Donghao Ren, Bongshin Lee, & Matthew Brehmer.
In Volume 25, Issue 1 (Jan. 2019) of *IEEE Transactions on Visualization & Computer Graphics*
(Appeared at IEEE VIS 2018). H: 82 AR: 25% CC: 73
-  BEST PAPER HONORABLE MENTION AWARD

| | |
|--|---------|
| What's the Difference? Evaluating Variants of Multi-Series Bar Charts for Visual Comparison Tasks Arjun Srinivasan, Matthew Brehmer , Bongshin Lee, & Steven Drucker. In <i>Proceedings of the 2018 ACM Conference on Human Factors in Computing Systems (CHI)</i> . H: 101 AR: 26% CC: 20 | CHI18 |
| Timelines Revisited: A Design Space & Considerations for Expressive Storytelling Matthew Brehmer , Bongshin Lee, Benjamin Bach, Nathalie H. Riche, and Tamara Munzner. In Volume 23, Issue 9 (Sept. 2017) of <i>IEEE Transactions on Visualization & Computer Graphics</i> (Presented at IEEE VIS 2017). H: 82 CC: 132 | TVCG17 |
| ChartAccent: Annotation for Data-Driven Storytelling Donghao Ren, Matthew Brehmer , Bongshin Lee, Tobias Höllerer, and Eun Kyoung Choe. In <i>Proceedings of the 2017 IEEE PacificVis Symposium</i> . H: 18 CC: 72 | PVIS17 |
| Matches, Mismatches, & Methods: Multiple-View Workflows for Energy Portfolio Analysis Matthew Brehmer , Jocelyn Ng, Kevin Tate, & Tamara Munzner. In Volume 22, Issue 1 (Jan. 2016) of <i>IEEE Transactions on Visualization & Computer Graphics</i> (Presented at IEEE VIS 2015).H: 82 AR: 21% CC: 34 | TVCG16A |
| TimeLineCurator: Interactive Authoring of Visual Timelines from Unstructured Text Johanna Fulda, Matthew Brehmer , & Tamara Munzner. In Volume 22, Issue 1 (Jan. 2016) of <i>IEEE Transactions on Visualization & Computer Graphics</i> (Appeared at IEEE VIS 2015). H: 82 CC: 66 | TVCG16a |
| C-TOC (Cognitive Testing on Computer): Investigating the Usability & Validity of a Novel Self-administered Cognitive Assessment Tool in Aging & Early Dementia 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 <i>Alzheimer Disease & Associated Disorders (July 2015)</i> . CC: 15 | ADAD15 |
| Overview: The Design, Adoption, & Analysis of a Visual Document Mining Tool For Investigative Journalists Matthew Brehmer , Stephen Ingram, Jonathan Stray, & Tamara Munzner. In Volume 20, Issue 12 (Dec. 2014) of <i>IEEE Transactions on Visualization & Computer Graphics</i> (Presented at IEEE VIS 2014). H: 82 AR: 23% CC: 110 | TVCG14 |
| A Multi-Level Typology of Abstract Visualization Tasks Matthew Brehmer & Tamara Munzner. In Volume 19, Issue 12 (Dec. 2013) of <i>IEEE Transactions on Visualization & Computer Graphics</i> (Presented at IEEE VIS 2013). H: 82 AR: 25% CC: 576  THE MOST CITED IEEE INFOVIS PAPER SINCE 2013. | TVCG13 |
| Investigating Interruptions in the Context of Computerized Cognitive Testing for Older Adults Matthew Brehmer , Joanna McGrenere, Charlotte Tang, & Claudia Jacova. In <i>Proceedings of the 2012 ACM Conference on Human Factors in Computing Systems (CHI)</i> . H: 101 AR: 23% CC: 12 | CHI12 |
| The Haptic Crayola Effect: Exploring the Role of Naming in Learning Haptic Stimuli Inwook Hwang, Karon MacLean, Matthew Brehmer , Jeff Hendy, Andreas Sotirkopoulos, & Seungmoon Choi. In <i>Proceedings of the 2011 IEEE World Haptics Conference</i> . CC: 11 | WHC11 |
| Activate Your GAIM: A Toolkit for Input in Active Games Matthew Brehmer , Nicholas Graham, & Tadeusz Stach. In <i>Proceedings of the 2010 ACM Future Play Conference</i> . CC: 13 | FP10 |
| Classifying Input for Active Games Tadeusz Stach, Nicholas Graham, Matthew Brehmer & Andreas Hollatz. In <i>Proceedings of the 2009 ACM Conference on Advances in Computer Entertainment Technology (ACE)</i> . CC: 27 | ACE09 |

PEER-REVIEWED WORKSHOP PAPERS


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|---|----------|
| Reflecting on the Evaluation of Visualization Authoring Systems Donghao Ren, Bongshin Lee, Matthew Brehmer , & Nathalie H. Riche. In the <i>Proceedings of the 2018 BELIV Workshop: Evaluation & Beyond - Methodological Approaches for Visualization</i> cc: 22. | BELIV18 |
| Data Visualization on Mobile Devices Bongshin Lee, Matthew Brehmer , Eun Kyoung Choe, Petra Isenberg, Ricardo Langer, & Raimund Dachseit. In <i>Extended Abstract Proceedings of the 2018 ACM Conference on Human Factors in Computing Systems (CHI)</i> cc: 24. | CHI-EA18 |
| Visualizing Dimensionally-Reduced Data: Interviews with Analysts & a Characterization of Task Sequences Matthew Brehmer , Michael Sedlmair, Stephen Ingram, & Tamara Munzner. In <i>Proceedings of the 2014 ACM BELIV Workshop: Beyond Time & Errors - Novel Evaluation Methods for Visualization</i> cc: 83. | BELIV14A |
| Pre-Design Empiricism for Information Visualization: Scenarios, Methods, & Challenges Matthew Brehmer , Sheelagh Carpendale, Bongshin Lee, & Melanie Tory. In <i>Proceedings of the 2014 ACM BELIV Workshop: Beyond Time & Errors - Novel Evaluation Methods for Visualization</i> cc: 32. | BELIV14b |
| A Tale of Two Studies: Investigating the Impact of Interruptions on Task Performance in Older Adults Matthew Brehmer , Charlotte Tang, Joanna McGrenere, & Claudia Jacova. In the <i>Work-In-Progress Proceedings of the the 2011 GRAND NCE AGM</i> . | GRAND11 |
| OTHER PUBLICATIONS: BOOK CHAPTERS, TECHNICAL REPORTS, POSTERS, THESES | |
| Interacting with Visualization on Mobile Devices Matthew Brehmer , Bongshin Lee, John Stasko, & Christian Tominski. To appear in <i>Mobile Data Visualization</i> , edited by Bongshin Lee, Raimund Dachseit, Petra Isenberg, Eun Kyoung Choe (CRC Press, 2021). | MDVa |
| Responsive Visualization Design for Mobile Devices Tom Horak, Wolfgang Aigner, Matthew Brehmer , Alark Joshi, & Christian Tominski. To appear in <i>Mobile Data Visualization</i> , edited by Bongshin Lee, Raimund Dachseit, Petra Isenberg, Eun Kyoung Choe (CRC Press, 2021). | MDVb |
| Evaluating Data-Driven Stories & Storytelling Tools Fereshteh Amini*, Matthew Brehmer *, Gordon Bolduan, Christina Elmer, & Benjamin Wiederkehr (* contributed equally). In <i>Data-Driven Storytelling</i> , edited by Sheelagh Carpendale, Nicholas Diakopoulos, Christophe Hurter, Nathalie H. Riche (CRC Press, 2018) cc: 3. | DDS18 |
| Demonstrating the Value of Visualization: Highlights from the 2017 PacificVis Visual Data Storytelling Contest Matthew Brehmer , Kyungwon Lee, Ivan Viola, Jinwook Seo, & Bongshin Lee. In <i>Poster Proceedings of the 2017 IEEE VIS Conference</i> . | VIS17 |
| Why Visualization? Task Abstraction for Analysis & Design Matthew Brehmer . University of British Columbia PhD Dissertation (2016). | T16 |
| Dimensionality Reduction in the Wild: Gaps & Guidance Michael Sedlmair, Matthew Brehmer , Stephen Ingram, & Tamara Munzner. University of British Columbia Technical Report TR-2012-03 (2012) cc: 29. | TR2012 |
| Usability & the Effects of Interruption in C-TOC: Self-Administered Cognitive Testing on a Computer Matthew Brehmer . University of British Columbia MSc Thesis (2011) cc: 3. | T11 |
| Assessing the Effect of Exercise Intensity on Cognitive Task Performance in an Exercise Video Game Matthew Brehmer . Queen's University B.Comp Thesis (2009). | T09 |

TALKS

Slides available at mattbrehmer.ca/#talks.  = video available.

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|---|----------------|
| Generative Design Inspiration for Glyphs with Diatoms IEEE VIS 2021 (Virtual)  | 2021 / 10 / 29 |
| From Jam Session to Concert Hall IEEE VIS 2021 (Virtual, with Robert Kosara)  | 2021 / 10 / 27 |
| New Perspectives on Communicating with Visualization University of Waterloo (Waterloo, Canada) | 2021 / 10 / 08 |
| The Information in Our Hands Information+ Conference 2021 (Virtual)  | 2021 / 09 / 30 |
| Interactive Tools for Visualizing Data: Perspectives from Research + Practice University of Victoria - Information Visualization - Guest Speaker Series (Virtual) | 2021 / 02 / 10 |
| Interactive Tools for Visualizing Data: Perspectives from Research + Practice University of Edinburgh's online course for DataVis professionals (Virtual)  | 2020 / 06 / 24 |
| See & Understand Networks) Tableau Conference (Las Vegas, USA, with Scott Sherman)  | 2019 / 11 / 13 |
| An Evaluation of Animation & Small Multiples for Trend Visualization on Mobile Phones IEEE VIS 2019 (Vancouver, Canada)  | 2019 / 10 / 23 |
| Crowdsourced Evaluation for Mobile Vis Mobile Data Visualization Dagstuhl Seminar (Wadern, Germany) | 2019 / 07 / 17 |
| Expressive Visualization Tools for Data-Driven Storytelling ASA Symposium on Data Science & Statistics (SDSS) (Bellevue, USA) | 2019 / 05 / 30 |
| Visualizing Quantities & Events Over Time Chatham Labs (Toronto, Canada) | 2019 / 04 / 25 |
| Constraints & Opportunities for Expressive Information Design Tableau Research (Seattle, USA) | 2019 / 04 / 09 |
| Visualizing Information on Mobile Phones Microsoft Research (Redmond, USA) | 2019 / 03 / 13 |
| Constraints & Opportunities for Expressive Information Design Uncharted Software (Toronto, Canada) | 2019 / 03 / 01 |
| Considerations for Interactive & Expressive Information Design Tools University of Ontario Institute of Technology (Oshawa, Canada) | 2019 / 02 / 27 |
| Considerations for Interactive & Expressive Information Design Tools Autodesk Research (Toronto, Canada) | 2019 / 02 / 26 |
| Timeline Storyteller: An Authoring Tool for Expressive Timeline Narratives The Computation + Journalism Symposium (Coral Gables, USA)  | 2019 / 02 / 02 |
| Constraints & Opportunities for Expressive Information Design Simon Fraser University School of Interactive Arts & Technology (Surrey, Canada) | 2019 / 01 / 28 |
| Visualizing Ranges over Time on Mobile Phones IEEE VIS 2018 (Berlin, Germany)  | 2018 / 10 / 24 |
| Tools for Expressive Information Visualization Design Microsoft Vancouver Data Visualization Symposium (Vancouver, Canada) | 2018 / 08 / 01 |
| Timeline Storyteller, from Visualization Design Space to Deployment Data Empowerment Speaker Series (University of Calgary, Canada) | 2018 / 06 / 18 |
| Data-Driven Storytelling at Microsoft UBC School of Journalism, Topics in Contemporary Journalism: Data Viz (JRNL 520H) (Vancouver, Canada) | 2017 / 10 / 24 |
| Timelines Revisited: Considerations for Expressive Storytelling IEEE VIS 2017 (Phoenix, USA) | 2017 / 10 / 03 |
| Expressive Storytelling With Timelines Uber Visualization Night: A Journey Through Space & Time (Seattle, USA) | 2017 / 08 / 31 |
| Timelines Revisited: Considerations for Expressive Storytelling King's College London Department of Informatics (London, UK) | 2017 / 07 / 11 |
| Timelines Revisited: Considerations for Expressive Storytelling City University London giCentre (London, UK) | 2017 / 07 / 10 |
| The Timeline Storyteller Custom Visual for Power BI Microsoft Data Insights Summit BI Power Hour (Seattle, USA)  | 2017 / 06 / 13 |

TALKS (CONT.)

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|---|----------------|
| Timelines Revisited: Considerations for Expressive Storytelling Northeastern University NUVis Visualization Consortium (Boston, USA) | 2017 / 04 / 28 |
| Timelines Revisited: Considerations for Expressive Storytelling Bentley University RealViz talk series (Waltham, USA)  | 2017 / 04 / 27 |
| What Story Does Your Timeline Tell? OpenVisConf 2017 (Boston, USA)  | 2017 / 04 / 24 |
| Timelines Revisited: Considerations for Expressive Storytelling Radcliffe Institute at Harvard University (Cambridge, USA) | 2016 / 12 / 08 |
| Why Visualization? Task Abstraction for Analysis & Design Dissertation Defence (Vancouver, Canada) | 2016 / 03 / 23 |
| Storytelling with Timeline Data Data-Driven Storytelling Dagstuhl Seminar (Wadern, Germany) | 2016 / 02 / 11 |
| Why Visualization? Task Abstraction for Analysis & Design Microsoft Research (Redmond, USA)  | 2016 / 02 / 01 |
| Matches, Mismatches, & Methods: Workflows for Energy Portfolio Analysis IEEE VIS 2015 (Chicago, USA)  | 2015 / 10 / 28 |
| Multiple-View Workflows for Energy Portfolio Analysis University of Washington (Seattle, USA) | 2015 / 09 / 04 |
| The Future of Data & Design ... In Visualization Research Vancouver Data Visualization Meetup (Vancouver, Canada) | 2015 / 05 / 19 |
| Overview: The Design, Adoption, & Analysis of a Visual Document Mining Tool For Investigative Journalists IEEE VIS 2014 (Paris, France)  | 2014 / 11 / 14 |
| Visualizing Dimensionally-Reduced Data: Interviews with Analysts & a Characterization of Task Sequences ACM BELIV 2014 (Paris, France) | 2014 / 11 / 10 |
| Pre-Design Empiricism for Information Visualization ACM BELIV 2014 (Paris, France) | 2014 / 11 / 10 |
| Visualization Task Abstraction from Multiple Perspectives IEEE VIS Doctoral Colloquium 2014 (Paris, France) | 2014 / 11 / 08 |
| A Multi-Level Typology of Abstract Visualization Tasks IEEE VIS 2013 (Atlanta, USA) | 2013 / 10 / 15 |
| Investigating Interruptions in the Context of Computerized Cognitive Testing for Older Adults ACM CHI 2012 (Austin, USA) | 2012 / 05 / 10 |
| The Impact of Interruptions on Task Performance in Older Adults GRAND NCE AGM 2011 (Vancouver, Canada) | 2011 / 05 / 14 |

DEMONSTRATIONS

| | |
|--|---------------------|
| Tilt & Pose-Based Gesture Interaction Microsoft TechFest 2019 (Redmond, USA) | 2019 / 03 / 04 - 06 |
| Timeline Storyteller The Computation + Journalism Symposium (Coral Gables, USA) | 2019 / 02 / 01 |
| Charticulator Tapestry Conference 2018 (Coral Gables, USA) | 2018 / 12 / 01 |
| Timeline Storyteller Microsoft Research Week (Redmond, USA) | 2017 / 03 / 09 |
| Timeline Storyteller Tapestry Conference 2017 (St. Augustine, USA) | 2017 / 03 / 01 |

COMMUNITY SERVICE

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 (VIS) | 2021 |
| Information+ Conference | 2018, 2021 |
| IEEE Conference on Information Visualization (InfoVis) | 2017 - 2019 |
| Computation + Journalism (C+J) | 2019 |
| VISAP: The IEEE VIS Arts Program | 2018 |
| BELIV: Evaluation & Beyond - Methodological Approaches for Visualization | 2018 |
| 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 |

EXTERNAL REVIEWING

| | |
|---|-------------------|
| ACM Conference on Human Factors in Computing Systems (CHI) | 2013 - 2022 |
| EuroGraphics / VGTC Conference on Visualization (EuroVis) | 2014 - 2021 |
| IEEE Transactions on Visualization & Computer Graphics (TVCG) | 2015 - 2021 |
| SAGE Information Visualization Journal | 2015 - 2021 |
| IEEE Conference on Information Visualization (InfoVis) | 2013 - 2016, 2020 |
| 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

| | |
|---|------------------|
| 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, 2017, 2018 |
| 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) | 2011, 2013, 2015, 2016 |
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PROFESSIONAL ASSOCIATIONS

| | |
|--|-------------|
| Data Visualization Society Board of Directors Nomination Committee | 2020 - 2021 |
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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

| | |
|---|------|
| 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 |