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

PEER-REVIEWED JOURNAL AND CONFERENCE PAPERS

Generative Design Inspiration for Glyphs with Diatoms — TVCG-22A

Matthew Brehmer, Robert Kosara, & Carmen Hull.
To appear in *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS 2021). AR: 26%

From Jam Session to Recital: Synchronous Communication & Collaboration Around Data in Organizations — TVCG-22B

Matthew Brehmer & Robert Kosara.
To appear in *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS 2021). AR: 26% CC: 1

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 (Feb. 2021) of *IEEE Transactions on Visualization & Computer Graphics* (Appeared at IEEE VIS 2020). CC: 6

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* (Appeared at EuroVis 2020). CC: 8

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 (Jan. 2020) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2019).
AR: 26% CC: 30

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 (Jan. 2020) of *IEEE Transactions on Visualization & Computer Graphics* (Appeared at IEEE VIS / InfoVis 2019).
AR: 26% CC: 43

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: 5

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: 8

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: 34

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: 8

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 (Jan. 2019) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2018).
AR: 25% CC: 37

Charticulator: Interactive Construction of Bespoke Chart Layouts — TVCG-19B

Donghao Ren, Bongshin Lee, & **Matthew Brehmer**.
In Vol. 25-1 (Jan. 2019) of *IEEE Transactions on Visualization & Computer Graphics* (Appeared at IEEE VIS / InfoVis 2018).
AR: 25% CC: 73
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: 20

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 (Sept. 2017) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS 2017). CC: 134

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: 75

Matches, Mismatches, & Methods: Multiple-View Workflows for Energy Portfolio Analysis TVCG-16A
Matthew Brehmer, Jocelyn Ng, Kevin Tate, & Tamara Munzner.
In Vol. 22-1 (Jan. 2016) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2015).
AR: 21% CC: 34

TimeLineCurator: Interactive Authoring of Visual Timelines from Unstructured Text TVCG-16B
Johanna Fulda, **Matthew Brehmer**, & Tamara Munzner.
In Vol 22-1 (Jan. 2016) of *IEEE Transactions on Visualization & Computer Graphics* (Appeared at IEEE VIS / VAST 2015).
CC: 66

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: 15

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 (Dec. 2014) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2014). AR: 23% CC: 110

A Multi-Level Typology of Abstract Visualization Tasks TVCG-13
Matthew Brehmer & Tamara Munzner.
In Volume 19-12 (Dec. 2013) of *IEEE Transactions on Visualization & Computer Graphics* (Presented at IEEE VIS / InfoVis 2013). AR: 25% CC: 579
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: 11

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: 13

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: 27

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: 22.

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: 24.

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: 83.

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: 32.

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).

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).

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: 9.

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).

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: 47.

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

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

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

Applying a Visual Analytics Intent Language to Generate Data Visualizations P-2021A
Vidya Setlur, Scott Sherman, & **Matthew Brehmer**.
US17219784. Filed 2021-03-31.