Ben Shneiderman

List of Publications by Citations

154 papers	8,940 citations	50 h-index	92 g-index
168 ext. papers	10,552 ext. citations	4.8 avg, IF	6.84 L-index

#	Paper	IF	Citations
154	Tree visualization with tree-maps. *ACM Transactions on Graphics*, **1992**, 11, 92-99	7.6	794
153	Designing trust into online experiences. *Communications of the ACM*, **2000**, 43, 57-59	2.5	406
152	The Reader-to-Leader Framework: Motivating Technology-Mediated Social Participation. *AIS Transactions on Human-Computer Interaction*, **2009**, 1, 13-32	1.2	405
151	Creativity support tools: accelerating discovery and innovation. *Communications of the ACM*, **2007**, 50, 20-32	2.5	328
150	Universal usability. *Communications of the ACM*, **2000**, 43, 84-91	2.5	291
149	LifeLines: visualizing personal histories **1996**,		259
148	The future of interactive systems and the emergence of direct manipulation This paper was originally presented as the Keynote Address at the N.Y.U. Symposium on User Interfaces, 26 28 May 1982, New York, U.S.A. It will be published in Human Factors and Interactive Computer Systems, 1983, edited by Y. Vassiliou, Ablex Publishing Co., Norwood, New Jersey, U.S.A.. *Behaviour*	2.4	212
147	Dynamic Query Tools for Time Series Data Sets: Timebox Widgets for Interactive Exploration. *Information Visualization*, **2004**, 3, 1-18	2.4	208
146	Dynamic queries for information exploration **1992**,		205
145	Strategies for evaluating information visualization tools **2006**,		203
144	Visual information seeking **1994**,		192
143	High precision touchscreens: design strategies and comparisons with a mouse. *International Journal of Man-Machine Studies*, **1991**, 34, 593-613		183
142	Determining Causes and Severity of End-User Frustration. *International Journal of Human-Computer Interaction*, **2004**, 17, 333-356	3.6	178
141	Syntactic/semantic interactions in programmer behavior: A model and experimental results. *International Journal of Computer & Information Sciences*, **1979**, 8, 219-238		171
140	Network visualization by semantic substrates. *IEEE Transactions on Visualization and Computer Graphics*, **2006**, 12, 733-40	4	168
139	Experimental investigations of the utility of detailed flowcharts in programming. *Communications of the ACM*, **1977**, 20, 373-381	2.5	157
138	Temporal event sequence simplification. *IEEE Transactions on Visualization and Computer Graphics*, **2013**, 19, 2227-36	4	154

137	Community response grids: E-government, social networks, and effective emergency management. *Telecommunications Policy*, **2007**, 31, 592-604	4	148
136	Split menus. *ACM Transactions on Computer-Human Interaction*, **1994**, 1, 27-51	4.7	140
135	Exploratory experiments in programmer behavior. *International Journal of Computer & Information Sciences*, **1976**, 5, 123-143		137
134	Human-Centered Artificial Intelligence: Reliable, Safe & Trustworthy. *International Journal of Human-Computer Interaction*, **2020**, 36, 495-504	3.6	132
133	A Rank-by-Feature Framework for Interactive Exploration of Multidimensional Data. *Information Visualization*, **2005**, 4, 96-113	2.4	129
132	Balancing systematic and flexible exploration of social networks. *IEEE Transactions on Visualization and Computer Graphics*, **2006**, 12, 693-700	4	127
131	Computer science. Science 2.0. *Science*, **2008**, 319, 1349-50	33.3	124
130	Creativity Support Tools: Report From a U.S. National Science Foundation Sponsored Workshop. *International Journal of Human-Computer Interaction*, **2006**, 20, 61-77	3.6	119
129	The Eyes Have It: A Task by Data Type Taxonomy for Information Visualizations **2003**, 364-371		107
128	Inventing Discovery Tools: Combining Information Visualization with Data Mining. *Information Visualization*, **2002**, 1, 5-12	2.4	105
127	The dynamic HomeFinder **1992**,		105
126	Improving Healthcare with Interactive Visualization. *Computer*, **2013**, 46, 58-66	1.6	103
125	eHealth research from the user's perspective. *American Journal of Preventive Medicine*, **2007**, 32, S97-103	6.1	102
124	Sorting out searching. *Communications of the ACM*, **1998**, 41, 95-98	2.5	99
123	Creativity support tools. *Communications of the ACM*, **2002**, 45, 116-120	2.5	95
122	Snap-together visualization: can users construct and operate coordinated visualizations?. *International Journal of Human Computer Studies*, **2000**, 53, 715-739	4.6	94
121	Program indentation and comprehensibility. *Communications of the ACM*, **1983**, 26, 861-867	2.5	85
120	Temporal summaries: supporting temporal categorical searching, aggregation and comparison. *IEEE Transactions on Visualization and Computer Graphics*, **2009**, 15, 1049-56	4	84

119	Motif simplification **2013**,		83
118	Investigating touchscreen typing: the effect of keyboard size on typing speed. *Behaviour and Information Technology*, **1993**, 12, 17-22	2.4	80
117	Workplace user frustration with computers: an exploratory investigation of the causes and severity. *Behaviour and Information Technology*, **2006**, 25, 239-251	2.4	78
116	A Visual Interface for Multivariate Temporal Data: Finding Patterns of Events across Multiple Histories **2006**,		64
115	Bridging the Gap Between Ethics and Practice. *ACM Transactions on Interactive Intelligent Systems*, **2020**, 10, 1-31	1.8	61
114	Users can change their web search tactics: Design guidelines for categorized overviews. *Information Processing and Management*, **2008**, 44, 463-484	6.3	58
113	A graphical filter/flow representation of Boolean queries: A prototype implementation and evaluation. *Journal of the Association for Information Science and Technology*, **1993**, 44, 327-339		58
112	Embedded menus: selecting items in context. *Communications of the ACM*, **1986**, 29, 312-318	2.5	58
111	Knowledge discovery in high-dimensional data: case studies and a user survey for the rank-by-feature framework. *IEEE Transactions on Visualization and Computer Graphics*, **2006**, 12, 311-22	4	56
110	Severity and impact of computer user frustration: A comparison of student and workplace users. *Interacting With Computers*, **2006**, 18, 187-207	1.6	56
109	Clarifying Search. *D-Lib Magazine*, **1997**, 3,		56
108	Navigating in hyperspace. *Communications of the ACM*, **1994**, 37, 87-96	2.5	55
107	Previews and overviews in digital libraries: Designing surrogates to support visual information seeking. *Journal of the Association for Information Science and Technology*, **2000**, 51, 380-393		53
106	A model for computer frustration: the role of instrumental and dispositional factors on incident, session, and post-session frustration and mood. *Computers in Human Behavior*, **2006**, 22, 941-961	7.7	52
105	The New ABCs of Research **2016**,		52
104	Rapid understanding of scientific paper collections: Integrating statistics, text analytics, and visualization. *Journal of the Association for Information Science and Technology*, **2012**, 63, 2351-2369		50
103	Interface and data architecture for query preview in networked information systems. *ACM Transactions on Information Systems*, **1999**, 17, 320-341	4.8	49
102	An exploratory evaluation of three interfaces for browsing large hierarchical tables of contents. *ACM Transactions on Information Systems*, **1994**, 12, 383-406	4.8	49

101	Multiparty Grammars and Related Features for Defining Interactive Systems. *IEEE Transactions on Systems, Man, and Cybernetics*, **1982**, 12, 148-154		45
100	RelatedCreatedDonate: a teaching/learning philosophy for the cyber-generation. *Computers and Education*, **1998**, 31, 25-39	9.5	44
99	Data Sonification for Users with Visual Impairment. *ACM Transactions on Computer-Human Interaction*, **2008**, 15, 1-28	4.7	44
98	Using Treemaps to Visualize the Analytic Hierarchy Process. *Information Systems Research*, **1995**, 6, 357-375	3.8	44
97	Windows of opportunity in electronic classrooms. *Communications of the ACM*, **1995**, 38, 19-24	2.5	42
96	A task taxonomy for network evolution analysis. *IEEE Transactions on Visualization and Computer Graphics*, **2014**, 20, 365-76	4	40
95	Perspective-based Usability Inspection: An Empirical Validation of Efficacy. *Empirical Software Engineering*, **1999**, 4, 43-69	3.3	39
94	Designing Semantic Substrates for Visual Network Exploration. *Information Visualization*, **2007**, 6, 281-300	2.4	34
93	Universal usability as a stimulus to advanced interface design. *Behaviour and Information Technology*, **2001**, 20, 367-376	2.4	33
92	Novel user interface design for medication reconciliation: an evaluation of Twinlist. *Journal of the American Medical Informatics Association: JAMIA*, **2015**, 22, 340-9	8.6	31
91	Exploring auction databases through interactive visualization. *Decision Support Systems*, **2006**, 42, 1521-1538	5.6	31
90	Visualizing change over time using dynamic hierarchies: TreeVersity2 and the StemView. *IEEE Transactions on Visualization and Computer Graphics*, **2013**, 19, 2566-75	4	30
89	Evaluating three museum installations of a hypertext system. *Journal of the Association for Information Science and Technology*, **1989**, 40, 172-182		30
88	A Spectrum of Automatic Hypertext Constructions. *New Review of Hypermedia and Multimedia*, **1989**, 1, 179-195		29
87	The big picture for big data: visualization. *Science*, **2014**, 343, 730	33.3	26
86	Web science. *Communications of the ACM*, **2007**, 50, 25-27	2.5	26
85	Designing menu selection systems. *Journal of the Association for Information Science and Technology*, **1986**, 37, 57-70		25
84	Public health. 911.gov. *Science*, **2007**, 315, 944	33.3	24

83	We can design better user interfaces: A review of human-computer interaction styles. *Ergonomics*, **1988**, 31, 699-710	2.9	23
82	. *IEEE Transactions on Technology and Society*, **2020**, 1, 73-82	5.2	22
81	Group-in-a-Box Layout for Multi-faceted Analysis of Communities **2011**,		21
80	Social network analysis: Measuring, mapping, and modeling collections of connections **2020**, 31-51		20
79	Representing Unevenly-Spaced Time Series Data for Visualization and Interactive Exploration. *Lecture Notes in Computer Science*, **2005**, 835-846	0.9	20
78	Learning a menu selection tree: training methods compared. *Behaviour and Information Technology*, **1985**, 4, 81-91	2.4	19
77	Using interactive visualizations of WWW log data to characterize access patterns and inform site design. *Journal of the Association for Information Science and Technology*, **2001**, 52, 331-343		18
76	Inventing Discovery Tools: Combining Information Visualization with Data Mining. *Lecture Notes in Computer Science*, **2001**, 17-28	0.9	18
75	Looking for the bright side of user interface agents. *Interactions*, **1995**, 2, 13-15	1	18
74	Incorporating String Search in a Hypertext System: User Interface and Signature File Design Issues. *New Review of Hypermedia and Multimedia*, **1990**, 2, 183-200		18
73	A graphical filter/flow representation of Boolean queries: A prototype implementation and evaluation **1993**, 44, 327		18
72	Inventing discovery tools: combining information visualization with data mining. *Information Visualization*, **2002**, 1, 5-12	2.4	17
71	Do You Know the Way to SNA?: A Process Model for Analyzing and Visualizing Social Media Network Data **2012**,		16
70	Emergent patterns of teaching/learning in electronic classrooms. *Educational Technology Research and Development*, **1998**, 46, 23-42	3.6	15
69	Human values and the future of technology: a declaration of empowerment. *ACM SIGCAS Computers and Society*, **1990**, 20, 1-6	0	15
68	Monitoring Academic Conferences: Real-Time Visualization and Retrospective Analysis of Backchannel Conversations **2012**,		14
67	NetVisia: Heat Map & Matrix Visualization of Dynamic Social Network Statistics & Content **2011**,		14
66	The end of zero-hit queries: query previews for NASA Global Change Master Directory. *International Journal on Digital Libraries*, **1999**, 2, 79-90	1.4	14

65	Visual overviews for discovering key papers and influences across research fronts. *Journal of the Association for Information Science and Technology*, **2009**, 60, 2219-2228		13
64	EventGraphs: Charting Collections of Conference Connections **2011**,		13
63	Using rhythms of relationships to understand e-mail archives. *Journal of the Association for Information Science and Technology*, **2006**, 57, 1936-1948		13
62	Time Stress Effects on Two Menu Selection Systems. *Proceedings of the Human Factors Society Annual Meeting*, **1987**, 31, 727-731		13
61	Innovation trajectories for information visualizations: Comparing treemaps, cone trees, and hyperbolic trees. *Information Visualization*, **2012**, 11, 87-105	2.4	12
60	Twin-Win Model: A human-centered approach to research success. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 12590-12594	11.5	12
59	Governing AI safety through independent audits. *Nature Machine Intelligence*, **2021**, 3, 566-571	22.5	10
58	Apply or Die: On the Role and Assessment of Application Papers in Visualization. *IEEE Computer Graphics and Applications*, **2017**, 37, 96-104	1.7	9
57	Discovering temporal changes in hierarchical transportation data: Visual analytics & text reporting tools. *Transportation Research Part C: Emerging Technologies*, **2015**, 51, 167-179	8.4	9
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55	TreeVersity: Interactive Visualizations for Comparing Hierarchical Data Sets. *Transportation Research Record*, **2013**, 2392, 48-58	1.7	9
54	Colour-coded pixel-based highly interactive Web mapping for georeferenced data exploration. *International Journal of Geographical Information Science*, **2005**, 19, 413-428	4.1	9
53	Facilitating data exploration with query previews: A study of user performance and preference. *Behaviour and Information Technology*, **2000**, 19, 393-403	2.4	9
52	An experimental evaluation of three touch screen strategies within a hypertext database. *International Journal of Human-Computer Interaction*, **1989**, 1, 41-52	3.6	9
51	Future directions for human-computer interaction. *International Journal of Human-Computer Interaction*, **1990**, 2, 73-90	3.6	9
50	Reducing wrong patient selection errors: exploring the design space of user interface techniques **2014**, 2014, 1056-65	0.7	9
49	A Temporal Pattern Search Algorithm for Personal History Event Visualization. *IEEE Transactions on Knowledge and Data Engineering*, **2012**, 24, 799-812	4.2	8
48	Community response grids: using information technology to help communities respond to bioterror emergencies. *Biosecurity and Bioterrorism*, **2007**, 5, 335-45		8

47	Visual Information Seeking: Tight Coupling of Dynamic Query Filters with Starfield Displays **2003**, 7-13		8
46	An evaluation of jump-ahead techniques in menu selection. *Behaviour and Information Technology*, **1987**, 6, 97-108	2.4	8
45	Increasing Recognition of Wrong-Patient Errors through Improved Interface Design of a Computerized Provider Order Entry System. *International Journal of Human-Computer Interaction*, **2018**, 34, 383-398	3.6	7
44	TreeCovery: Coordinated dual treemap visualization for exploring the Recovery Act. *Government Information Quarterly*, **2012**, 29, 212-222	7.6	7
43	Graph analytics-lessons learned and challenges ahead. *IEEE Computer Graphics and Applications*, **2011**, 31, 18-29	1.7	7
42	A national initiative for social participation. *Science*, **2009**, 323, 1426-7	33.3	7
41	Enabling teachers to explore grade patterns to identify individual needs and promote fairer student assessment. *Computers and Education*, **2008**, 51, 1467-1485	9.5	7
40	Designing to Facilitate Browsing: A Look Back at the Hyperties Workstation Browser. *New Review of Hypermedia and Multimedia*, **1991**, 3, 101-117		7
39	A photo history of SIGCHI. *Interactions*, **2002**, 9, 17-23	1	7
38	Technology-Mediated Social Participation: The Next 25 Years of HCI Challenges. *Lecture Notes in Computer Science*, **2011**, 3-14	0.9	7
37	Visual exploration across biomedical databases. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2011**, 8, 536-50	3	6
36	Exploring personal media: A spatial interface supporting user-defined semantic regions. *Journal of Visual Languages and Computing*, **2006**, 17, 254-283		6
35	Finding governmental statistical data on the Web: A study of categorically organized links for the FedStats topics page. *Journal of the Association for Information Science and Technology*, **2004**, 55, 1008-1015		6
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33	Exploring Data Distributions: Visual Design and Evaluation. *International Journal of Human-Computer Interaction*, **2013**, 29, 77-95	3.6	5
32	Human Responsibility for Autonomous Agents. *IEEE Intelligent Systems*, **2007**, 22, 60-61	4.2	5
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30	Evaluating visual and statistical exploration of scientific literature networks **2011**,		4

29	MediaFinder **2003**,		4
28	Snap-Together Visualization: A User Interface for Coordinating Visualizations via Relational Schemata **2003**, 341-348		4
27	Creativity and collaboration: Revisiting cybernetic serendipity. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 1837-1843	11.5	3
26	TreeVersity: Comparing tree structures by topology and node's attributes differences **2011**,		3
25	Toward an enriched (and revitalized) sense of help: Summary of an ASIS&T 2005 panel session. *Bulletin of the American Society for Information Science*, **2007**, 32, 23-26		3
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23	Component-based, user-constructed, multiple-view visualization **2001**,		3
22	Distance learning **1998**,		3
21	Responsible AI. *Communications of the ACM*, **2021**, 64, 32-35	2.5	3
20	Visually Exploring Social Participation in Encyclopedia of Life **2012**,		2
19	Commentary: extraordinary excitement empowering enhancing everyone. *Human-Computer Interaction*,1-3	2.9	2
18	Evaluating three museum installations of a hypertext system **1989**, 40, 172		2
17	Using interactive visualizations of WWW log data to characterize access patterns and inform site design **2001**, 52, 331		2
16	Elastic windows: design, implementation, and evaluation of multi-window operations. *Software - Practice and Experience*, **1998**, 28, 225-248	2.5	1
15	Broadening Access to Large Online Databases by Generalizing Query Previews **2003**, 31-37		1
14	Information visualization advanced interface and Web design **1998**,		1
13	Understanding human reactivites and relationships. *Interactions*, **2002**, 9, 40-53	1	1
12	Visualizing Digital Library Search Results with Categorical and Hierarchical Axes **2003**, 169-177		1

11	Advanced graphic user interfaces. *ACM Computing Surveys*, **1996**, 28, 144	13.4	1
10	Visualizing Functional Data with an Application to eBay's Online Auctions **2008**, 873-898		0
9	Dynamic Aggregation to Support Pattern Discovery: A Case Study with Web Logs. *Lecture Notes in Computer Science*, **2001**, 464-469	0.9	0
8	Inventing discovery tools: combining information visualization with data mining **2003**, 378-385		0
7	Human-Centered AI: A New Synthesis. *Lecture Notes in Computer Science*, **2021**, 3-8	0.9	0
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5	Multidimensional Analysis and Visualization on Large Biomedical Data **2010**, 157-184		
4	Designing community-based emergency communication system: A preliminary study. *Proceedings of the American Society for Information Science and Technology*, **2008**, 45, 1-3		
3	A trip report on creativity & cognition 1999. *ACM SIGCHI Bulletin*, **2000**, 32, 43-46		
2	Direct Annotation: A Drag-and-Drop Strategy for Labeling Photos **2003**, 58-65		
1	Installation, orientation, and layout **2020**, 55-66		