CURRICULUM VITAE

NICHOLAS A. DIAKOPOULOS

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| EDUCATION Ph.D. in Computer Science Georgia Institute of Technology, Atlanta, GA | August 2009 |
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| M.S. in Computer Science Georgia Institute of Technology, Atlanta, GA | December 2005 |
| Sc.B. (B.S.) in Computer Engineering: Multimedia Signal Processing Brown University, Providence, RI | May 2002 |
| ACADEMIC EXPERIENCE Northwestern University | |
| Assistant Professor, School of Communication, Dept. of Communication Studies Assistant Professor (by courtesy), Dept. of Computer Science | 8/2017 – present 5/2018 – present |
| University of Maryland, College Park Assistant Professor, College of Journalism Affiliate Assistant Professor, College of Information Studies Affiliate Assistant Professor, Department of Computer Science | 8/2014 - 7/2017 10/2014 - 7/2017 7/2015 - 7/2017 |
| Columbia University, School of Journalism Tow Fellow | 7/2013 – present |
| University of Bergen, Department of Information and Media Studies Associate Professor II Adjunct Research Fellow Visiting Assistant Professor | 11/2015 – present 2/2012 – 12/2014 8/2009 – 10/2009 |
| City University of New York, School of Journalism Research Fellow | 11/2011 – 6/2012 |
| Rutgers University, School of Communication and Information Computing Innovation Fellow | 11/2009 – 10/2011 |
| Drew University, Department of Mathematics and Computer Science Adjunct Assistant Professor | Spring 2011 |
| Georgia Institute of Technology, School of Interactive Computing Research Assistant Co-Instructor, Computational Journalism TI:GER – Technological Innovation: Generating Economic Results | 2003 – 2009 Spring 2007, 2008 Ill 2007 – Spring 2009 |
| Brown University, Computer Science Department Research Assistant – Graphics Lab Undergraduate Teaching Assistant Undergraduate Teaching Assistant | 1/2000 – 1/2001 Fall 2000 Spring 1999 |

WORK EXPERIENCE

Principal, Interaction Foundry

10/2011 - present

New York, NY

Founded a consultancy for user interface and experience design with a focus on data visualization and social media analytics; Working across web and mobile platforms to deliver evidence-based designs for visual analytic interfaces

Summer Faculty Fellow, Chartbeat

6/2016 - 7/2016

New York, NY

Worked with the data science team to do research on news novelty and attention patterns

AAAS Mass Media Fellow, Sacramento Bee

Summer 2009

Sacramento, CA

Host: Scott Lebar, Assistant Managing Editor

Reported on science topics of interest in the Sacramento region including both writing stories and programming interactive simulations and graphics

Research Intern, Fuji-Xerox Palo Alto Laboratory (FXPAL)

Summer 2006

Palo Alto, CA

Host: Patrick Chiu

Designed and evaluated a collaborative game for tagging images on a tabletop computer; Presented research and helped write paper and patent application

Guest Researcher, Joanneum Research IIS

Summer 2004

Graz, Austria

Host: Georg Thallinger

Conducted an extensive literature review on automatic object recognition algorithms; Prototyped and evaluated algorithms for a broadcast video object recognition system

Guest Researcher, Fraunhofer IGD

Summer 2001, 8/2002 - 6/2003

Darmstadt, Germany

Host: Stephan Volmer

Developed video processing technology for content based video retrieval and tracking; Presented results of research and wrote and published papers; Worked with students on various research projects

Student Researcher, Fraunhofer CRCG

12/2000 - 5/2002

Providence, RI

Advisor: Peter Stephenson

Helped develop a new, efficient, and patented algorithm for line antialiasing; Helped write and publish the results of line antialiasing work; Researched more efficient ray-tracing methods as they relate to volume rendering

Software Engineering Intern, Avid Technology: Film and Video Effects Group

Summer 2000

Tewksbury, MA

Cross platform development (NT and Mac) of a real time audio effects subsystem for the avid video editor; Large scale software engineering and re-engineering using design patterns

Programming Intern, Astro-Med Inc.

6/1997 - 8/1999

West Warwick, RI

Programmed Windows user applications and extensible ActiveX components in MFC; Worked with other designers on various GUIs for a label design program

GRANTS AND GIFTS

| CAREER: Computational Journalism: Integrating Algorithms and People in the Producti | |
|---|---------------|
| of News Information – \$550,000 as PI from the National Science Foundation | (2019-2024) |
| Algorithmic Accountability and Journalism $-$ \$25,000 gift from Facebook Research | (2018) |
| Assessing the Role of Platform Algorithms in Shaping News Attention – $\$500,000$ as PI from the National Science Foundation | (2017-2020) |
| Algorithms List – \$5,000 as PI from Rutgers Institute for Information Policy & Law | (2016-2017) |
| Algorithmic Accountability – \$280,000 as PI from Tow Center via Knight Foundation | (2015-2017) |
| Revisiting Segregation through Computational History – \$25,000 from the Future of Information Alliance (FIA) | (2015) |
| CommentIQ – \$35,000 from the Knight Foundation | (2014-2015) |
| Detection and Presentation of Community and Global Event Content from Social Media Sources. – \$250,000 as Co-PI from the NSF | (2010 – 2013) |
| Computing Innovation Fellow – \$267,500 from the NSF via CRA | (2009 – 2011) |

AWARDS AND HONORS

Research Communicator Impact Award (University of Maryland, College Park, 2016)

Best Paper Honorable Mention (CHI Conference, 2012, 2016, 2019 - Top 5% of papers)

AAAS Mass Media Fellow (AAAS, 2009 – 10% acceptance rate)

NSF IGERT Fellow (Integrative Graduate Education and Research Traineeship) 2007 – 2009

PhD Student Research Excellence Commendation (SIC, Georgia Tech, 2008)

Foley Scholars Finalist (GVU Center, Georgia Tech, 2008)

Presidential Fellowship recipient (Georgia Tech, 2003 – 2008)

NSF Graduate Research Fellowship Honorable Mention (2002, 2004)

Graduated Magna Cum Laude (top 20% Brown University, 2002)

Outstanding Student Award in Computer Engineering (Brown University, 2002)

PUBLICATIONS

Books

- 1. N. Diakopoulos. Automating the News: How Algorithms are Rewriting the Media. *Harvard University Press.* June, 2019.
- 2. Data-Driven Storytelling. Eds. N. Riche, C. Hurter, N. Diakopoulos, S. Carpendale. *A.K. Peters / CRC Press.* March, 2018.
- 3. B. Shneiderman, C. Plaisant, M. Cohen, S. Jacobs, N. Elmqvist, N. Diakopoulos. Designing the User Interface (DTUI). 6th Edition. *Pearson*. May, 2016.

Journal Articles

- 4. N. Hagar and N. Diakopoulos. Optimizing Content with A/B Headline Testing: Changing Newsroom Practices. *Media and Communication*, 7 (1), 2019.
- 5. D. Park, S. Kim, J. Lee, J. Choo, N. Diakopoulos. N. Elmqvist. ConceptVector: Text Visual Analytics via Interactive Lexicon Building using Word Embedding. *Transactions on Visualization and Computer Graphics* (TVCG). 2018.
- 6. K. Assmann, N. Diakopoulos. Negotiating Change: Audience Engagement Editors as Newsroom Intermediaries. *#ISOJ Journal*. April, 2017.
- 7. N. Diakopoulos and M. Koliska. Algorithmic Transparency in the News Media. *Digital Journalism*. 2016.
- 8. T. Lokot and N. Diakopoulos. News Bots: Automating News and Information Dissemination on Twitter. *Digital Journalism*. 2016.
- 9. E. Momeni, C. Cardi, N. Diakopoulos. A Survey on Assessment and Ranking Methodologies for User-Generated Content on the Web. *ACM Computing Surveys*. 48 (3). 2016.
- 10. N. Diakopoulos. Picking the NYT Picks: Editorial Criteria and Automation in the Curation of Online News Comments. #ISOJ Journal. April, 2015.
- 11. N. Diakopoulos. Algorithmic Accountability: Journalistic Investigation of Computational Power Structures. *Digital Journalism*. 2015.
- 12. Elgesem, D., L. Steskal and N. Diakopoulos. The Structure and Content of the Discourse on Climate Change in the Blogosphere: The Big Picture. *Environmental Communication*. 2015.
- 13. J. Hullman and N. Diakopoulos. Visualization Rhetoric: Framing Effects in Narrative Visualization. *Trans. on Visualization and Computer Graphics*. 2011. (26% acceptance rate)
- 14. N. Diakopoulos, P. Stephenson. Anti-Aliased Lines Using Run-Masks. *Computer Graphics Forum*, vol. 24, no. 2, 2005.

Peer-Reviewed Archival Publications

- 15. D. Trielli and N. Diakopoulos. Search as News Curator: The Role of Google in Shaping Attention to News Information. *Proc. Conference on Human Factors in Computing Systems (CHI)*, 2019. **(Best Paper Honorable Mention)**
- 16. S. Sachar, N. Diakopoulos. Changing Names in Online News Comments at the New York Times. *Proc. International Conference on Web and Social Media (ICWSM)*. May, 2016. (17% acceptance rate)
- 17. D. Park, S. Sachar, N. Diakopoulos, and N. Elmqvist. Supporting Comment Moderators in Identifying High Quality Online News Comments. *Proc. Conference on Human Factors in Computing Systems (CHI)*. May, 2016. (23% acceptance rate, 5% rate of award) (Best Paper Honorable Mention)
- 18. A. Olteanu, C. Castillo, N. Diakopoulos, K. Aberer. Comparing Events Coverage in Online News and Social Media: The Case of Climate Change. *Proc. International Conference on Web and Social Media (ICWSM)*. May, 2015. (19% acceptance rate)
- N. Diakopoulos. The Editor's Eye: Curation and Comment Relevance on the New York Times. Proc. Conference on Computer Supported Cooperative Work (CSCW). March 2015. (28% acceptance rate)
- 20. J. Hullman, N. Diakopoulos, E. Momeni, E. Adar. Content, Context, and Critique: Commenting on a Data Visualization Blog. Proc. Conference on Computer Supported Cooperative Work (CSCW). March 2015. (28% acceptance rate)
- 21. N. Diakopoulos and A. Zubiaga. Newsworthiness and Network Gatekeeping on Twitter: The Role of Social Deviance. Proc. International Conference on Weblogs and Social Media (ICWSM). June, 2014.

- 22. N. Diakopoulos, A. Zhang, D. Elgesem, A. Salway. Identifying and Analyzing Moral Evaluation Frames in Climate Change Blog Discourse. Proc. International Conference on Weblogs and Social Media (ICWSM). June, 2014.
- 23. T. Gao, J. Hullman, E. Adar, B. Hecht, N. Diakopoulos. NewsViews: An Automated Pipeline for Creating Custom Geovisualizations for News. Proc. Conference on Human Factors in Computing Systems (CHI). 2014. (23% acceptance rate)
- 24. J. Hullman, N. Diakopoulos, E. Adar. Contextifier: Automatic Generation of Annotated Stock Visualizations. Proc. Conference on Human Factors in Computing Systems (CHI). May 2013.
- 25. N. Diakopoulos, M. De Choudhury, M. Naaman. Finding and Assessing Social Media Information Sources in the Context of Journalism. Proc. Conference on Human Factors in Computing Systems (CHI). May 2012. (23% acceptance rate) (**Best Paper Honorable Mention**)
- 26. M. De Choudhury, N. Diakopoulos, M. Naaman. Unfolding the Event Landscape on Twitter: Classification and Exploration of User Categories. Proc. Conference on Computer Supported Cooperative Work (CSCW). February, 2012. (top 9% of submissions)
- 28. N. Diakopoulos, F. Kivran-Swaine, M. Naaman. Playable Data: Characterizing the Design Space of Game-y Infographics. Proc. Conference on Human Factors in Computing Systems (CHI). May 2011. (26% acceptance rate)
- 29. N. Diakopoulos, M. Naaman. Towards Quality Discourse in Online News Comments. Proc. Conference on Computer Supported Cooperative Work (CSCW). March, 2011. (21.6% acceptance rate)
- 30. N. Diakopoulos, M. Naaman, F. Kivran-Swaine. Diamonds in the Rough: Social Media Visual Analytics for Journalistic Inquiry. Proc. Conference on Visual Analytics Science and Technology (VAST). October, 2010. (27.7% acceptance rate)
- 31. N. Diakopoulos and D. A. Shamma. Characterizing Debate Performance via Aggregated Twitter Sentiment. Proc. Conference on Human Factors in Computing Systems (CHI). April 2010. (22% acceptance rate)
- 32. K. Luther, N. Diakopoulos, A. Bruckman. Edits & Credits: Exploring Integration and Attribution in Online Creative Collaboration. Proc. Conference on Human Factors in Computing Systems (CHI) alt.chi. April, 2010.
- 33. N. Diakopoulos, S. Goldenberg, I. Essa. Videolyzer: Quality Analysis of Online Informational Video for Bloggers and Journalists. Proc. Conference on Human Factors in Computing Systems (CHI). April 2009. (24.5% acceptance rate)
- 34. N. Diakopoulos, K. Luther, I. Essa. Audio Puzzler: Piecing Together Time-Stamped Speech Transcripts with a Puzzle Game. Proc. ACM Conference on Multimedia. October, 2008.
- 35. N. Diakopoulos, I. Essa. An Annotation Model for Making Sense of Information Quality in Online Video. Proc. International Conference on the Pragmatic Web (ICPW). September, 2008.
- 36. N. Diakopoulos, K. Luther, Y. Medynskiy, I. Essa. The Evolution of Authorship in a Remix Society. Proc. Hypertext and Hypermedia. September 2007. (29% acceptance rate)
- 37. N. Diakopoulos, I. Essa. Videotater: An Approach for Pen-Based Digital Video Segmentation and Tagging. Proc. User Interface Software and Technology (UIST). October 2006 (23% acceptance rate)
- 38. N. Diakopoulos, I. Essa. Mediating Photo Collage Authoring. Proc. User Interface Software and Technology (UIST). October 2005. (19% acceptance rate)
- 39. N. Diakopoulos, I. Essa, and R. Jain. Content Based Image Synthesis. Proc. Conference on Image and Video Retrieval (CIVR). July 2004. pp 299-307. (17% acceptance rate)

40. S. Volmer and N. Diakopoulos. Contextually Meaningful Representation of Color for the Description of Visual Content. Proc. 6th International Conference on Visual Information Systems. September 2003.

Book Chapters, Reports, and Other Articles

- 41. N. Diakopoulos. Transparency. Oxford Handbook of Ethics and Al. 2019 (forthcoming)
- 42. C-G Lindén, H. Tuulonen, A. Bäck, N. Diakopoulos, M. Granroth-Wilding, L. Haapanen, L. Leppänen, M. Melin, T. Moring, M. Munezero, S. Sirén-Heikel, C. Södergård, H. Toivonen. News Automation: The Rewards, Risks and Realities of 'Machine Journalism'. WAN IFRA Report. March, 2019.
- 43. N. Diakopoulos. The Algorithms Beat. *Data Journalism Handbook*. Eds. Liliana Bornegru and Jonathan Gray. November, 2018.
- 44. M. Koliska and N. Diakopoulos. Disclose, Decode and Demystify: An Empirical Guide to Algorithmic Transparency. *The Routledge Handbook of Developments in Digital Journalism Studies*. Eds. Scott Eldridge II and Bob Franklin. October, 2018
- 45. N. Diakopoulos, D. Trielli, J. Stark, S. Mussenden. I vote for How search informs our choice of candidate. In *Digital Dominance: Implications and Risks*. Eds. M. Moore and D. Tambini. June, 2018.
- 46. N. Diakopoulos. Ethics in Data-Driven Visual Storytelling. *Data-Driven Storytelling*. Eds. N. Riche, C. Hurter, N. Diakopoulos, S. Carpendale. A.K. Peters / CRC Press. March, 2018.
- 47. S. Drucker, S. Huron, R. Kosara, J. Schwabish, N. Diakopoulos. Communicating Data to an Audience. *Data-Driven Storytelling*. Eds. N. Riche, C. Hurter, N. Diakopoulos, S. Carpendale. A.K. Peters / CRC Press. March, 2018.
- 48. N. Diakopoulos. Enabling Accountability of Algorithmic Media: Transparency as a Constructive and Critical Lens. Towards glass-box data mining for Big and Small Data. Eds. Tania Cerquitelli, Daniele Quercia, Frank Pasquale. Springer. 2017.
- 49. N. Diakopoulos. Computational Journalism and the Emergence of News Platforms. The Routledge Companion to Digital Journalism Studies. Eds. Scott Eldridge II and Bob Franklin. August, 2016.
- 50. N. Diakopoulos. Accountability in Algorithmic Decision Making: A view from Computational Journalism. Communications of the ACM (CACM). Feb, 2016.
- 51. N. Diakopoulos. Algorithmic Accountability Reporting: On the Investigation of Black Boxes. Tow Center for Digital Journalism at Columbia University. January 2014.
- 52. N. Diakopoulos. Cultivating the Landscape of Innovation in Computational Journalism. Tow-Knight Center for Entrepreneurial Journalism at CUNY. April 2012.
- 53. N. Diakopoulos, M. Naaman, T. Yazdani, F. Kivran-Swaine. Social Media Visual Analytics for Events. In Social Media Modeling and Computing. Eds. Steven Hoi, Jiebo Luo, Susanne Boll, Dong Xu, Rong Jin, Irwin King. Springer Verlag. 2011.

Peer Reviewed Non-Archival Publications

- 54. J. Bandy and N. Diakopoulos. Getting to the Core of Algorithmic News Aggregators: Applying a Crowdsourced Audit to The Trending Stories Section of Apple News. Computation + Journalism Symposium. February, 2019.
- 55. D. Trielli and N. Diakopoulos. Defining the Role of User Input Bias in Personalized Platforms. Proc. ICWSM Workshop on Algorithmic Personalization and News. 2018.
- 56. Y. Wang and N. Diakopoulos. Considerations for Article-Level Personalization of News Content. Proc. ICWSM Workshop on Algorithmic Personalization and News. 2018.

- 57. D. Trielli, J. Stark and N. Diakopoulos. Algorithm Tips: A Resource for Algorithmic Accountability in Government. Proc. Computation + Journalism Symposium. September, 2017.
- 58. J. Stark and N. Diakopoulos. Using Baselines for Algorithm Audits. European Conference on Data and Computational Journalism. July, 2017.
- 59. J. Stark and N. Diakopoulos. Towards Editorial Transparency in Computational Journalism. *Proc. Computation + Journalism Symposium*. September, 2016.
- 60. N. Diakopoulos, D. Elgesem, A. Salway, A. Zhang, K. Hofland. Compare Clouds: Visualizing Text Corpora to Compare Media Frames. Proc. IUI Workshop on Visual Text Analytics. 2015.
- 61. Yelena Mejova, Amy X. Zhang, Nicholas Diakopoulos and Carlos Castillo. Controversy and Sentiment in Online News. Proc. Symposium on Computation + Journalism. Poster track. Oct, 2014.
- 62. N. Diakopoulos, Stephen Cass, and Joshua Romero. Data-Driven Rankings: The Design and Development of the IEEE Top Programming Languages News App. Proc. Symposium on Computation + Journalism. Oct, 2014.
- 63. N. Diakopoulos, A. Zhang, A. Salway. Visual Analytics of Media Frames in Online News and Blogs. IEEE InfoVis Workshop on Text Visualization. 2013.
- 64. N. Diakopoulos. Visual Analytics of Blog Corpora for Communication Scholars. IEEE InfoVis workshop on Interactive Visual Text Analytics. October 2012.
- 65. A. Salway, N. Diakopoulos, D. Elgesem. Visualizing Information Diffusion and Polarization with Key Statements. International Conference on Weblogs and Social Media (ICWSM) workshop on Social Media Visualization. June, 2012.
- 66. F. Kivran-Swaine, Sam Brody, Nicholas Diakopoulos, Mor Naaman. Of Joy and Gender: Emotional Expression in Online Social Networks. Conference on Computer Supported Cooperative Work (CSCW) Works in Progress. February, 2012.
- 67. N. Diakopoulos. Design Challenges in Playable Data. CHI Workshop on Gamification. May, 2011.
- 68. N. Diakopoulos and M. Naaman. Topicality, Time, and Sentiment in Online News Comments. Conference on Human Factors in Computing Systems (CHI) Works in Progress. May, 2011.
- 69. Z. Yu, N. Diakopoulos, M. Naaman. The Multiplayer: Multi-perspective Social Video Navigation. In Proc. Addendum of User Interface Software Technology (UIST). October 2010.
- N. Diakopoulos. Game-y Information Graphics. Conference on Human Factors in Computing Systems (CHI) Works in Progress. April 2010.
- 71. N. Diakopoulos, I. Essa. Modulating Video Credibility via Visualization of Quality Evaluations. WWW Workshop on Information Credibility on the Web (WICOW). April, 2010.
- 72. S. Yardi, K. Luther, N. Diakopoulos, A. Bruckman. Opening The Black Box: Four Views of Transparency in Remix Culture. CSCW Workshop on Tinkering, Tailoring, & Mashing: The Social and Collaborative Practices of the Read-Write Web. November, 2008.
- 73. P. Chiu, J. Huang, M. Back, N. Diakopoulos, J. Doherty, W. Polak, X. Sun. mTable: Browsing Photos and Videos on a Tabletop System. ACM Multimedia Video Program. 2008.
- 74. N. Diakopoulos, P. Chiu. PhotoPlay: A Collocated Collaborative Photo Tagging Game on a Horizontal Display. In Proceedings addendum of User Interface Software Technology (UIST). October 2007.
- 75. A. St. Clair, M. Fong, N. Diakopoulos, I. Essa. NARC: The News Article Revision Comparator. In Proceedings addendum of User Interface Software Technology (UIST). October 2007.
- 76. K. Luther and N. Diakopoulos. Distributed Creativity. Creativity and Cognition Workshop on Supporting Creative Acts Beyond Dissemination. June 2007.
- 77. N. Diakopoulos, I. Essa. Supporting Personal Media Authoring . ACM Multimedia workshop on Multimedia for Human Communication (MHC). November 2005.

- 78. H. Rehatschek, N. Diakopoulos, G. Kienast, V. Hahn, T. Declerck. DIRECT-INFO: A Distributed Multimodal Analysis System for Media Monitoring Applications. European Workshop on the Integration of Knowledge, Semantics and Digital Media Technology (EWIMT 2004). November 2004.
- 79. N. Diakopoulos and S. Volmer. Temporally Tolerant Video Matching. SIG IR Multimedia Information Retrieval Workshop. August 2003

Selected Works in Public Media

- 80. N. Diakopoulos. Boosting local news with data journalism and automation. Columbia Journalism Review. January, 2019.
- 81. N. Diakopoulos. What a report from Germany teaches us about investigating algorithms. Columbia Journalism Review. January, 2018
- 82. N. Diakopoulos. An algorithmic nose for news. Columbia Journalism Review. November, 2018.
- 83. N. Diakopoulos. Bots and the future of automated accountability. Columbia Journalism Review. September, 2018.
- 84. N. Diakopoulos. There are a lot of rote tasks a good AI interviewer could do for you. Columbia Journalism Review. June, 2018
- 85. N. Diakopoulos. Reporting in a Machine Reality: Deepfakes, misinformation, and what journalists can do about them. Columbia Journalism Review. May, 2018
- 86. N. Diakopoulos. The bots beat: How not to get punked by automation. Columbia Journalism Review. April, 2018.
- 87. D. Trielli and N. Diakopoulos. How to report on algorithms even if you're not a data whiz. Columbia Journalism Review. May, 2017.
- 88. N. Diakopoulos and S. Friedler. How to Hold Algorithms Accountable. MIT Technology Review. November, 2016.
- 89. N. Diakopoulos. BuzzFeed's pro tennis investigation displays ethical dilemmas of data journalism. Columbia Journalism Review. November, 2016.
- 90. D. Trielli and N. Diakopoulos. How Google Shapes the News You See About the Candidates. Slate. November, 2016.
- 91. D. Trielli, S. Mussenden, J. Stark, N. Diakopoulos. Googling Politics: How the Google issue guide on candidates is biased. Slate. June, 2016.
- 92. N. Diakopoulos. We need to know the algorithms the government uses to make important decisions about us. The Conversation. May, 2016.
- 93. J. Stark and N. Diakopoulos. Uber seems to offer better service in areas with more white people. That raises some tough questions. Washington Post. March, 2016.
- 94. N. Diakopoulos. How to Hold Governments Accountable for the Algorithms They Use. Slate. Feb. 2016
- 95. D. Trielli, S. Mussenden, N. Diakopoulos. Why Google Search Results Favor Democrats. Slate. Dec. 2015
- N. Diakopoulos, S. Cass. Top Programming Languages Ranking. IEEE Spectrum. 2014, 2015, 2016
- 97. N. Diakopoulos. How Uber Surge Pricing Really Works. Washington Post. April, 2015
- 98. N. Diakopoulos. Bots on the Beat. Slate. April, 2014
- 99. N. Diakopoulos. Sex, Violence, and Autocomplete Algorithms. Slate. August, 2013
- 100. N. Diakopoulos. Rage Against the Algorithms. The Atlantic. October, 2013

Patents

- 1. Peter Stephenson, Bruce Litow, and Nicholas Diakopoulos. Using line structure information to enhance line drawing in digital systems. US Patent # WO03052733. July 26, 2003
- 2. Nicholas Diakopoulos, Patrick Chiu. Photoplay: A Video Game for Tagging Photos on a Tabletop Display. US Patent #7,686,682 B2. March 30, 2010.

SELECTED PRESENTATIONS AND INVITED TALKS

- 1. *Invited Keynote*. Machines + Media Conference. "Automating the News: How Algorithms are Rewriting the News" New York, NY. May, 2019.
- 2. *Invited Talk*. Stanford University, Brown Institute for Media Innovation. "Automating the News: How Algorithms are Rewriting the News" Palo Alto, CA. April, 2019.
- 3. *Invited Talk*. University of Illinois Chicago. "Algorithmic Intermediaries and Attention to News Information" Chicago, IL. Feb, 2019.
- 4. *Invited Keynote*. UK Conference of Science Journalists. "Algorithmic Bias and Accountability" London, UK. October, 2018.
- 5. *Invited Panelist*. Yale University. Media Freedom and Information Access Clinic. "Algorithmic Accountability" New Haven, CT. October, 2018
- 6. Invited Respondent. Northwestern University. Law and STEM Forum. September, 2018.
- 7. *Invited Keynote*. SciCAR Conference. "How Newsrooms are Adapting to Advances in Artificial Intelligence" Dortmund, Germany. September, 2018.
- 8. *Invited Keynote*. ICWSM Workshop on News and Public Opinion. "News Bots: Agents of Information or Automated Sociopaths?" Palo Alto, CA. June, 2018.
- Invited Talk. SKUP Conference. "Algorithmic Accountability Reporting" Oslo, Norway. April, 2018.
- 10. *Invited Talk*. Watching in the Media Conference. "Neural Networks and Automated Content Synthesis" Bergen, Norway. March, 2018.
- 11. *Invited Talk*. Cardiff University. "Algorithmic Accountability Reporting" Cardiff, Wales. January, 2018
- 12. *Invited Panelist*. Computing Community Consortium (CCC) Annual Symposium. "Data and Algorithms" Washington, DC. October, 2017
- 13. *Invited Keynote*. KDD Workshop on Data Science + Journalism. "Journalistic Data Mining" Halifax, Canada. August, 2017.
- 14. *Invited Keynote*. European Investigative Journalism and Dataharvest Conference. "The Power of Algorithms" Mechelen, Belgium. May, 2017.
- 15. *Invited Panelist*. NYU Algorithms and Explanations Conference. "Explainability in Context Media" New York, NY. April, 2017
- 16. *Invited Panelist*. International Journalism Festival. "Collaborating with Algorithms" Perugia, Italy. April, 2017.
- 17. *Invited Talk*. University of Cambridge. "Algorithmic Accountability and Transparency: A View from Computational Journalism" Cambridge, England. March, 2017.
- 18. *Invited Talks*. University of Helsinki. "Computational Journalism and Computational Thinking" and "News Bots Design Workshop" Helsinki, Finland. March, 2017.
- 19. *Invited Talk*. Hans Bredow Institute for Media Research. "The Algorithmic Newsboys: Google and Facebook in the 2016 US Elections" Hamburg, Germany, December, 2016.

- 20. *Invited Talk*. Columbia University Communication PhD Colloquium. "Algorithmic Accountability and Transparency in the News Media" New York, New York, November 2016.
- 21. *Invited Talk*. Salzburg Academy on Media and Global Change. "Algorithmic Accountability and Transparency in the News Media" Salzburg, Austria, July 2016.
- 22. *Panelist*. International Communication Association (ICA), "Automation as an Editorial Act" Fukuoka, Japan, June 2016.
- 23. *Invited Talk*. Human Computer Interaction Lab Symposium, "Algorithmic Transparency in the User Interface" College Park, MD, May, 2016.
- 24. *Invited Keynote*. Nordic Data Journalism Conference (NODA). "Algorithmic Accountability and Transparency" Helsinki, Finland, April 2016.
- Invited Keynote. Social News on the Web (SNOW). "Enhancing Journalistic Curation of Online News Comments" Montreal, Canada, April 2016.
- 26. *Invited Panelist*. International Journalism Festival. "Can a robot do my job?" and "Creating community: how effective curation of interactive spaces can bring readers together". Perugia, Italy, April, 2016.
- 27. Panelist. NICAR Conference. "Algorithmic Accountability: Case Studies from the Field", Panel, Denver, CO, March, 2016
- 28. *Invited Talk*. Max Planck Institute. "Algorithmic Accountability and Transparency: A View from Computational Journalism" Saarbruecken, Germany. Feb. 2016.
- 29. *Invited Panelist*. New America Foundation. "The Tyranny of Algorithms" Washington, DC. Dec. 2015
- 30. *Invited Talk*. Virginia Tech. "Algorithmic Accountability and Transparency: A View from Computational Journalism" Blacksburg, VA. Dec. 2015
- 31. Invited Talk. Hacks / Hackers Berlin. "Algorithmic Accountability" Berlin, Germany. July 2015.
- 32. Invited Panelist. IRE Conference. "Investigating Black Boxes" Philadelphia, PA. June 2015.
- 33. *Invited Talk*. Appalachian State University. "Algorithmic Accountability: Developing a Critical Stance Towards the Algorithms in our Lives" Boone, NC. April 2015.
- 34. *Invited Talk*. NICAR Conference. "From words to pictures: Text analysis and visualization" Atlanta, GA, March 5, 2015
- 35. *Invited Talk*. New Practices in Journalism at Sciences Po. "Anatomy of a Robot Journalist" Paris, France, December 8, 2014.
- 36. *Invited Panelist.* World Economic Forum. "Accountability in a Data-Driven World" New York, October 22, 2014.
- 37. *Invited Talk*. HCI Group at University of Illinois (UIUC). "Computational Journalism: From Tools to Algorithmic Accountability" Urbana, IL, September 2014.
- 38. *Invited Talk*. Online News Association (ONA) Annual Conference. "Algorithms, Journalism, Democracy" Chicago, IL, September 2014.
- 39. *Invited Talk*. University of Maryland Campus Visualization Partnership Lecture Series. "The Virtues of Text in Data Visualization" College Park, MD, September 2014
- 40. *Panelist*. AEJMC Conference. "Apps, Algorithms, and Platforms: Emerging Objects of Digital Journalism" Montreal, Canada, August 2014.
- 41. *Invited Talk*. Quantifying Journalism: Data, Metrics, and Computation Conference. "Algorithmic Accountability Reporting: On the Investigation of Black Boxes." New York, NY, May 2014
- 42. *Invited Keynote*. REACTION Workshop on Computational Journalism. "Computational Journalism: From Tools to Algorithmic Accountability." Porto, Portugal. April 2014.

- 43. *Invited Keynote*. Journalism Interactive Conference. "Algorithmic Accountability Reporting: On the Investigation of Black Boxes." College Park, MD, April 2014
- 44. Panelist. NICAR Conference. "Holding Algorithms Accountable." February 2014
- 45. *Invited talk*. UNESCO International Conference on the "Memory of the World in the Digital Age: Digitization and Preservation" Vancouver, BC, September 2012.
- 46. *Invited Talk*. "Innovation and Computing in Journalism" Northwestern University, Evanston, II, May 2012.
- 47. *Invited Talk*. "Innovation and Computing in Journalism" University of Hong Kong, Hong Kong, March 2011.
- 48. *Invited Talk*. "What's the Story with Data?" DIY Days NYC, Parsons New School, New York, NY, March 2011.
- 49. *Invited Talk.* "Towards Quality Discourse in Online News Comments" UNESCO Iraqi Study Tour, Rutgers University, New Brunswick, NJ, January 2011.
- 50. *Invited Talk.* "Discount Usability: Methods and Application" Associated Press (AP), New York, NY, December, 2010.
- 51. *Invited Talk*. "Playable Data" Journalism Research Group, University of Bergen, Bergen, Norway, September, 2010.
- 52. *Invited Talk.* "Social Media Visual Analytics for Journalistic Inquiry" Journalism Research Group, University of Bergen, Bergen, Norway, May, 2010.
- 53. *Invited Talk*. "Computational Journalism: Visual Analytics for Journalistic Inquiry" American Public Media / Minnesota Public Radio, St. Paul, MN, May, 2010.
- 54. *Invited Talk*. "Computational Journalism: Visual Analytics for Journalistic Inquiry" IBM Research, Cambridge, MA, April, 2010
- 55. *Invited Talk.* "Computational Journalism: Commenting on the News" University of Michigan, Ann Arbor, MI, March 2010.
- 56. *Invited Talk.* "Computational Journalism: Commenting on the News" Michigan State University (MSU), East Lansing, MI, February 2010.
- 57. *Invited Talk*. N. Diakopoulos. "Computational Media: Annotation, Interaction, Communication" Fuji Xerox Palo Alto Laboratory (FXPAL), Palo Alto, CA, July 2009.
- 58. *Panelist*. "Computational Journalism: Content, Interfaces, Services, Business Models" OSCON, San Jose, CA, July 2009.
- 59. *Invited Talk*. "Computational Media: Annotation, Interaction, Communication" Yahoo! Research, Sunnyvale, CA, May 2009.
- 60. *Invited Talk*. "Computational Media: Annotation, Interaction, Communication" Telefónica Investigación y Desarollo (TID), Barcelona, Spain, May 2009.
- 61. Invited Talk. "Computational Journalism" The New York Times, New York, NY, April 2009.

PROFESSIONAL AND ACADEMIC SERVICE

Community and Conference Leadership Activities

Program Chair. Computation + Journalism Symposium, 2008, 2013, 2014, 2019 Co-Organizer. Algorithmic Personalization and News Workshop @ ICWSM, 2018 Workshops Co-Chair. International Conference on Web and Social Media (ICWSM), 2016 Co-Organizer. Dagstuhl Workshop on Data-Driven Storytelling, 2016 Program Chair. Workshop on Algorithmic Transparency in the Media, 2015

Program Committees

International Conference on Web and Social Media (ICWSM) Program Committee: 2014, 2015; Senior Program Committee: 2016, 2017, 2018, 2019

Conference on Fairness, Accountability, and Transparency (FAT*), 2018, 2019

Workshop on Misinformation, Computational Fact-Checking and Credible Web, Word Wide Web Conference, 2019

European Data and Computational Journalism Conference (Committee), 2017, 2018, 2019

Journalism, Misinformation, and Fact Checking, World Wide Web Conference, 2018

Data Science, Journalism, and Media Workshop @ KDD (Committee), 2018

News and Public Opinion Workshop @ ICWSM (Committee), 2016, 2017, 2018

Computation + Journalism Symposium (Committee), 2015, 2016, 2017

Social News on the Web (Committee), 2017

Social Media in the Newsroom ICWSM Workshop (Committee), 2016

EuroVis: Conference on Visualization, (Short Papers Committee), 2016

Workshop on Social Multimedia and Storytelling, 2014

Empirical Methods in Natural Language Processing, 2014

Joint InfoVis and ONA workshop on NewsVis: Mobile and Breaking News, 2013

North American Chapter of the Association for Computational Linguistics – Human Language Technologies (NAACL HLT), 2012

World Wide Web Conference, User Interfaces, Design, and Social Factors Track (WWW-IDS), 2012 InfoVis Workshop on Storytelling with Data, 2011

Conference on Human Factors in Computing Systems WIP (CHI), 2011

Symposium on User Interface Software and Technology (UIST), 2010

Workshop on Search in Social Media (SSM) at the Conference on Information and Knowledge Management, 2008

Editorial Boards

Digital Journalism, 2014-

Policy

US-ACM, Working Group on Algorithmic Accountability; Digital Governance Committee, 2016—

Grant Reviewing

Ethics and Governance of Al Initiative, Al and the News Challenge, 2018

Open Society Foundation, Information Program, 2017

Brown Institute for Media Innovation, Columbia University, 2013 – 2017

Knight Foundation, News Challenge, 2015

National Endowment for the Humanities, Digging into Data, 2016

Conference and Journal Reviewing

ACM SIGGRAPH, 2007 - 2008

Big Data & Society, 2017

Computers in Human Behavior, 2016

Computer Supported Cooperative Work (CSCW), 2008, 2010 – 2018

Conference on Human Factors in Computing Systems (CHI), 2006 - 2019

Digital Journalism, 2014 - 2018

EuroVis, 2011 - 2016

ICMI International Conference on Multimodal Interfaces, 2007

IEEE Computer Graphics and Applications, 2015

IEEE Information Visualization Conference (InfoVis), 2010 – 2013, 2016, 2018

IEEE Pervasive Computing, 2014

Information Visualization, 2014

International Communication Association (ICA) Journalism Studies Division, 2017, 2018

International Conference on Intelligent User Interfaces (IUI), 2010

International World Wide Web Conference (WWW), 2010

Journalism, 2015, 2016

Journalism Practice, 2017

Journalism Studies, 2018

Journalism Theory, Practice, Criticism, 2014

Journal of Communication, 2015, 2017, 2018

Journal of Information Policy, 2018

Journal of Computer Mediated Communication, 2014, 2015, 2017

New Media & Society, 2015, 2016, 2017, 2018

New Review of Hypermedia, 2014

Political Communication, 2016

Social Media & Society, 2016

Symposium on User Interface Software and Technology (UIST), 2004 – 2012

Symposium on Visual Analytics Science and Technology (VAST), 2010, 2011, 2012, 2018

The International Journal of Press/Politics, 2014

Transactions on Computer-Human Interaction, 2014

Transactions on Social Computing, 2017

Transactions on Visualization and Computer Graphics, 2015

Memberships

Association for Computing Machinery (ACM), 2006 - present

International Communication Association (ICA), 2016 - present

Institute of Electrical and Electronics Engineers (IEEE), 2002 - 2010

National Association of Science Writers (NASW), 2009

Tau Beta Pi national engineering honor society

Phi Beta Kappa national honor society

University

Master of Science in Artificial Intelligence (MSAI) Internal Advisory Board (Northwestern, 2018)

Computer Science + Journalism Faculty Search Committee (Northwestern, 2018)

Media, Technology, and Society Admissions Committee (Northwestern, 2018)

Technology and Social Behavior Admissions Committee (Northwestern, 2018)

Campus Visualization Partnership (UMD, Division of IT, 2014—2016)

Ph.D. Committee (UMD, College of Journalism, 2014—2017)

Program, Courses, and Curricula Committee (UMD, College of Journalism, 2015-2017)

Research Council (UMD Campus, 2015—2017)

Intel Opportunity Scholars Mentor (Georgia Tech, 2003 – 2008)

Graduate Student Council Faculty Recruiting Liaison (Georgia Tech, 2007)

Graduate Student Council CS Ph.D. Recruiting Liaison (Georgia Tech, 2008)

COURSES TAUGHT

Knight Lab Studio, Winter 2019

COMM 395, JOUR 342/442, EECS 397/497, Northwestern University

Storytelling with Data Visualization, Fall 2018

COMM 395, Northwestern University

Algorithmic News Media, Spring 2018

COMM 395 (undergraduate) and MTS 525 (graduate), Northwestern University

Computational Journalism, Spring 2016, 2017

JOUR 479V / 779V, University of Maryland

Storytelling with Data Visualization, Spring 2015, Fall 2015, 2016 JOUR 479D / 779D, University of Maryland

Interactive Multimedia Storytelling, Fall 2014 JOUR 354 / 654, University of Maryland

Human Interaction with Technology and Information, Spring 2011 CSCI 10, Drew University

DISSERTATION COMMITTEES

Committee. Miriam Boon. Northwestern University. Technology and Social Behavior.

Committee. Jason Cohn. Northwestern University. Computer Science.

Committee. Karin Assmann. Who's in charge? Audience Inclusion or Intrusion? Journalists' Arrangements with Their Audiences. University of Maryland, College Park. College of Journalism.

Committee. Cody Buntain. Discovering Credible Events in Near Real Time from Social Media Streams. University of Maryland, College Park. Department of Computer Science. Completed 2016.

Committee. Tetyana Lokot. Augmented Dissent: The Affordances of ICTs for Citizen Protest (A Case Study of the Ukraine Euromaidan Protest of 2013-2014). University of Maryland, College Park. College of Journalism. Completed 2016.

Advisor (external). Eirik Stavelin. Computational Journalism: When Journalism Meets Programming. University of Bergen, Norway. Department of Information Science and Media Studies. Completed 2014.

Personal Interests and Hobbies

Latin dancing and performance (Salsa, Bachata), Photography, Improv Theater, Travel

LANGUAGES

Native English, Conversational German (written and spoken), Intermediate Spanish (written and spoken), basic Norwegian (written and spoken), dabbler in Greek, Arabic, French

CITIZENSHIP

United States of America