Jevin D. West

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Academic Positions

2013 - Assistant Professor, Information School, Univ. of Washington
2014 - Data Science Fellow, eScience Institute, Univ. of Washington
2014 - Affiliate Faculty, Center for Statistics & Social Sciences, Univ. of Washington

Research

Science of Science, Scholarly Communication, Big Scholarly Data, Digital Humanities

I study the *Science of Science*. I develop methods for tracking the origin and evolution of ideas and disciplines. My laboratory is the vast network of scholarly papers. I engineer *knowledge discovery* tools to both study science and facilitate science. These tools include interactive maps and recommendation algorithms. I use these tools to study the sociological and economic factors that drive and slow science. My goal is to help scientists and their computer compatriots read the literature, find relevant papers, generate new hypotheses, and maximize the problem-solving capabilities of science for the betterment of society.

Education

2011 - 2012 Postdoc, Department of Physics, Umea Unviersity, Sweden
2005 - 2010 Ph.D., Department of Biology, University of Washington
1996 - 2004 B.S., M.S., Department of Biology, Utah State University

Publications

Peer-Reviewed Journals

2016

P. Lee, **J.D. West**, and B. Howe (2016a). Viziometrics: Analyzing visual information in the scientific literature. *arXiv preprint:1605.04951*

L. Aulck and **J.D. West** (2016). Using large-scale, heterogeneous data to examine student persistence and performance: A focus on transfer students. *(in review)*

K.R. Larsen, D. Horvorka, A. Dennis, and **J.D. West** (2015). Understanding the elephant: A discourse approach to corpus identification for theory review articles. *(in review)*

Hiniker, A., Hong, R., Kim, Y., N. Chen, **J.D. West**, and Aragon, C. (2016). Toward the operationalization of visual metaphor. In *(in review)*

B.M. Althouse, M. Salathe, M. Lipsitch, C.T. Bergstrom, and **J.D. West** (2016). Heterogeneous vaccination coverage and measles transmission dynamics. *(in review)*

J.R. Nahum, **J.D. West**, B.A. Althouse, L. Zaman, C. Ofria, and B. Kerr (2016). Improved adaptation in exogenously and endogenously changing environments. *(in review)*

S. Bae, D. Halperin, **J.D. West**, M. Rosvall, and B. Howe (2016). Scalable and efficient flow-based community detection for large-scale graph analysis. *ACM Transactions on Knowledge Discovery from Data*, (in press)

J.D. West, I. Wesley-Smith, and C.T. Bergstrom (2016). A recommendation system based on hierarchical clustering of an article-level citation network. *IEEE Transactions on Big Data*, 2(2):113–123

2015 C.R. Sugimoto, C. Ni, **J.D. West**, and V. Larivire (2015). The academic advantage: Gender disparities in patenting. *PLoS ONE*, 10(5):e0128000

2014 **J.D. West**, T.C. Bergstrom, and C.T. Bergstrom (2014). Cost effectiveness of open access publications. *Economic Inquiry*, 52(4):1315–1321

M. Rosvall, A.V. Esquivel, A. Lancichinetti, **J.D. West**, and R. Lambiotte (2014). Memory in network flows and its effects on spreading dynamics and community detection. *Nature Communications*, 5(1):1–13

D. Vilhena, J. Foster, M. Rosvall, **J.D. West**, J. Evans, and C. Bergstrom (2014). Finding cultural holes: How structure and culture diverge in networks of scholarly communication. *Sociological Science*, 1(June):221–238

2013 **J.D. West**, M.C. Jensen, R.J. Dandrea, G.J. Gordon, and C.T. Bergstrom (2013c). Author-level Eigenfactor metrics: Evaluating the influence of authors, institutions, and countries within the social science research network community. *Journal of the American Society for Information Science and Technology*, 64(4):787–801

J.D. West, J. Jacquet, M.M. King, S.J. Correll, and C.T. Bergstrom (2013b). The role of gender in scholarly authorship. *PloS One*, 8(7):e66212

2010 **J.D. West**, T.C. Bergstrom, and C.T. Bergstrom (2010b). The eigenfactor metrics: A network approach to assessing scholarly journals. *College and Research Libraries*, 71(3):236–244

J.D. West, T.C. Bergstrom, and C.T. Bergstrom (2010a). Big macs and eigenfactor scores: Don't let correlation coefficients fool you. *Journal of the American Society for Information Science and Technology*, 61(9):1800–1807

2009 B.M. Althouse, **J.D. West**, C.T. Bergstrom, and T.C. Bergstrom (2009). Differences in impact factor across fields and over time. *Journal of the American Society for Information Science and Technology*, 60(1):27–34

F. Prado, A. Sheih, **J.D. West**, and B. Kerr (2009). Coevolutionary cycling of host sociality and pathogen virulence in contact networks. *Journal of theoretical biology*, 261(4):561–569

2005 **J.D. West**, D. Peak, J.Q. Peterson, and K.A. Mott (2005a). Dynamics of stomatal patches for a single surface of xanthium strumarium l. leaves observed with fluorescence and thermal images. *Plant, Cell & Environment*, 28(5):633–641

2004 D.Peak, **J.D. West**, S. Messinger, and K.A. Mott (2004). Evidence for complex, collective dynamics and emergent, distributed computation in plants. *Proceedings of the National Academy of Sciences of the United States of America*, 101(4):918–922

Peer-Reviewed Conferences

2016 **J.D. West** and J. Portenoy (2016b). Delineating fields using mathematical jargon. In *JCDL Workshop on Bibliometric-enhanced Information Retrieval and Natural Language Processing for Digital Libraries (BIRNDL)*

L. Aulck, N. Velagapudi, J. Blumenstock, and **J.D. West** (2016). Predicting student dropout in higher education. In *ICML Workshop on Data4Good: Machine Learning in Social Good Applications*

I. Wesley-Smith and **J.D. West** (2016). Babel: A platform for research in scholarly article recommendation. In *Proceedings of the 25th International Conference on World Wide Web*. ACM

P. Lee, **J.D. West**, and B. Howe (2016b). Viziometrix: A platform for analyzing the visual information in big scholarly data. In *Proceedings of the 25th International Conference on World Wide Web*. ACM

I. Wesley-Smith, C.T. Bergstrom, and **J.D. West** (2016). Static ranking of scholarly papers using article-level eigenfactor (ALEF). In *WSDM Conference: Entity Ranking Challenge Workshop*

J. Portenoy and **J.D. West** (2016b). Dynamic visualization of citation networks showing the influence of scholarly fields over time. In *WWW Worskhop on Semantics, Analytics, Visualisation: Enhancing Scholarly Data*

2015 I. Wesley-Smith, R.J. Dandrea, and **J.D. West** (2015). An experimental platform for scholarly article recommendation. In *Proc. of the 2nd Workshop on Bibliometric-enhanced Information Retrieval (BIR2015)*, pages 30–39

2014 K.R. Larsen, D. Hovorka, **J.D. West**, J. Birt, J.R. Pfaff, T.W. Chambers, Z.R. Sampedro, N. Zager, and B. Vanstone (2014). Theory identity: A machine-learning approach, (best paper nomination). In *System Sciences (HICSS), 2014 47th Hawaii International Conference on*, pages 4639–4648. IEEE

J.D. West (2014). Modifying the eigenfactor algorithm for improving interpretability. ASIS&T Workshop on Informetric and Scientometric Research, Seattle, WA

2013 S. Bae, D. Halperin, **J.D. West**, M. Rosvall, and B. Howe (2013). Scalable flow-based community detection for large-scale network analysis. In *Data Mining Workshops (ICDMW), 2013 IEEE 13th International Conference on*, pages 303–310. IEEE

M. Brooks, **J.D. West**, C.R. Aragon, and C.T. Bergstrom (2013). Hoptrees: branching history navigation for hierarchies. In *Human-Computer Interaction–INTERACT 2013*, pages 316–333. Springer

S. Milojevic, C. Rogers, J. Tennis, S. Van Hooland, , and **J.D. West** (2013). The temporal dimension in the study of knowledge bases: Approaches to understanding knowledge creation and representation over time. *Proceedings of the American Society for Information Science and Technology*, 50(1):1–3

2011 **J.D. West**, D. Peak, K.A. Mott, and S. Messinger (2011). Comparing the dynamics of stomatal networks to the problem-solving dynamics of cellular computers. In *Unifying Themes in Complex Systems*, pages 327–341. Springer

Journals Invited

2016 **J.D. West** (2016). The science of data science. *Journal of Integrated Creative Studies*, May, No.2016-010-e

2011 **J.D. West** and C.T. Bergstrom (2011). Can ignorance promote democracy? *Science*, 1216124(1503):334

2010 **J.D. West** (2010b). How to improve the use of metrics: Learn from game theory. *Nature*, 465:871–872

J.D. West, T.C. Bergstrom, and C.T. Bergstrom (2010c). Response to big macs and eigenfactor scores: The correlation conundrum. *Journal of the American Society for Information Science and Technology*, 61(12):2592–2592

2009 **J.D. West**, M. Stefaner, and C.T. Bergstrom (2009). The eigenfactor metrics: How does the journal of biological chemistry stack up? *American Society for Biochemistry & Molecular*

2008 C.T. Bergstrom and **J.D. West** (2008a). Assessing citations with the eigenfactor metrics. *Neurology*, 71(23):1850–1851

C.T. Bergstrom, **J.D. West**, and M. Wiseman (2008). The eigenfacto metrics. *The Journal of Neuroscience*, 28(45):11433–11434

J.D. West (2008). Eigenfactor - the google approach to bibliometrics. *FrontMatter, Allen Press*

Book Chapters

2016 **J.D. West** and A. Torrance (2016). The cambrian explosion in patent analytics. In Katz, M., Bommarito, M., and Dolin, R., editors, *Legal Informatics*, chapter (in prep). MIT Press

2015 **J.D. West** and J. Portenoy (2016a). The data gold rush in higher education. In Sugimoto, C., Ekbia, H., and Mattioli, M., editors, *Big Data is Not a Monolith*, chapter 6. MIT Press

2014 **J.D. West** and D. Vilhena (2014). A network approach to scholarly evaluation. In B. Cronin and C.R. Sugimoto, editors, *Beyond Bibliometrics: Harnessing Multidimensional Indicators of Scholarly Impact*, chapter 8, pages 151–166. MIT Press

2008 B. Kerr, **J.D. West**, and B. Bohannan (2008). Bacteriophages: models for exploring basic principles of ecology. In S.T. Abedon, editor, *Bacteriophage Ecology: Population Growth, Evolution, and Impact of Bacterial Viruses*, chapter 2, pages 31–63. Cambridge Univerity Press

Theses

2010 **J.D. West** (2010a). *Eigenfactor: ranking and mapping scientific knowledge.* PhD thesis, University of Washington, Department of Biology

2004 **J.D. West** (2004). Investigations into the spatial and temporal dynamics of stomatal networks to determine whether plants perform emergent, distributed computation. Master's thesis, Utah State University, Department of Biology

Patents

2015 **J.D. West**, A. Torrance, M. Rosvall, D. Vilhena, and C.T. Bergstrom (2013a). Systems and methods for data analysis. PCT Application Filed on Feb. 1, 2013

Pseudocode

2008 **J.D. West** and C.T. Bergstrom (2008a). Calculating author-level eigenfactor metrics. *Eigenfactor.org*

C.T. Bergstrom and **J.D. West** (2008b). Compressed source code for the eigenfactor calculation. *Eigenfactor.org*

J.D. West and C.T. Bergstrom (2008b). Calculating journal-level eigenfactor metrics. *Eigenfactor.org*

Posters

2016 M. Chow, **J.D. West**, Bodman, S., and Egna, H. (2016). Examining gender authorship in aquaculture journals. In *iConference*. March 20-23, Philadelphia, PA

J. Portenoy and **J.D. West** (2016a). Combining citation networks and interviews to generate narrative visualizations of scholars careers. In *iConference*. March 20-23, Philadelphia, PA

2015 I. Wesley-Smith and **J.D. West** (2015). Babel: Scholarly article recommendation as a service. In *iSchool Research Fair*. Nov. 19, Seattle, WA

J. Portenoy and **J.D. West** (2015). Combining citation networks and interviews to generate narrative visualizations of scholars careers. In *iSchool Research Fair*. Nov. 19, Seattle, WA

L. Aulck and **J.D. West** (2015). A data-driven at student attrition in higher education. In *iSchool Research Fair*. Nov. 19, Seattle, WA

J.D. West, E. Spiro, and J. Blumenstock (2015). The DataLab at the University of Washington. In *Technology Alliance Symposium*. March 3, Seattle, WA

2014 R. Hong, Y. Kim, A. Hiniker, N. Chen, C. Aragon, and **J.D. West** (2014). Using visual metaphor in interactive visualizations to improve navigation of complex data sets. In *UW iSchool Research Fair*. Nov. 20, Seattle, WA

2009 J. Nahum, B.M. Althouse, **J.D. West**, C. Ofria, and B. Kerr (2009). Traversing fitness landscapes by changing environments. In *Best Poster Award, Gordon Conference*. July. 20-24, Andover, NH

2007	**J.D. West**, J. Nahum, C. Levy, and B. Kerr (2007b). A top-down approach to discriminate adaptive landscape topology. In *Gordon Conference*. Andover, NH
	J.D. West, B. Kerr, and C.T. Bergstrom (2007a). Experimental teaching. In *Scholarship of Teaching and Learning*. University of Washington, Seattle, WA
2006	**J.D. West**, A. Dean, C. Neuhauser, B. Bohannan, and B. Kerr (2006). The evolution of a 'tragedy of the commons' in a host-pathogen metapopulation. In *EVO-WIBO*. Port Townsend, WA
2005	**J.D. West**, D. Peak, and K.A. Mott (2005b). Sophisticated information processing in plants. In *Symposium on Plant Neurobiology*. Universitatbonn, Florence, Italy
2004	**J.D. West**, S.M. Messinger, D. Peak, and K. Mott (2004b). Stomatal networks and cellular computation. In *International Conference on Complex Systems*. Best Poster Award (USU), Boston, MA
	J.D. West, S.M. Messinger, D. Peak, and K. Mott (2004a). Problem solving dynamics of stomatal networks. In *AAAS, Pacific Division*. Utah State University, Logan, UT
2003	**J.D. West**, S.M. Messinger, D. Peak, and K. Mott (2003). The game of leaf: Evidence that stomatal networks are cellular computers. In *International Conference on Networks*. Santa Fe, NM
2001	**J.D. West**, D. Peak, and K. Mott (2001). Stomatal networks. In *Utah State University Student Research Symposium*. Logan, UT

Presentations

Invited Talks

2016	Plenary. The Science of Science. *International Conference on Data-driven Discovery: Data Science Meets Information Science.* Fred Hutchinson Cancer Institute Annual Retreat, Grand Hyatt, Seattle, WA (Sept 12)
	Plenary. Ranking and Mapping Science. *International Conference on Data-driven Discovery: Data Science Meets Information Science.* National Science Library, Chinese Academy of Sciences, Beijing, China (June 20)
	Measuring and Messaging Research Outcomes. *Health Research Alliance Annual Meeting.* New York City, NY (April 1)
	Measuring the translational lag from scientific publications to patents. *International Symposium on Science of Science.* Library of Congress, Washington, DC (March 23)

Static Ranking of Scholarly Papers using Article-Level Eignefactor (ALEF). *WSDM Cup 2016 - Entity Ranking Challenge Workshop.* San Francisco, CA (Feb. 22)

Mapping the Emergence of Scientific Disciplines. *International Symposium on Advanced Future Studies.* Kyoto University, Japan (Feb. 12)

The Data Gold Rush in Science Education. *International Symposium on Advanced Future Studies.* Kyoto University, Japan (Feb. 11)

Facilitating discovery with zoomable maps. *Allen Institute for Artificial Intelligence.* Seattle, WA (Feb. 4)

2015

Mapping Knowledge Networks. *Duke University Machine Learning Seminar Series.* Durham, NC (Nov. 11)

Mapping the citation influence of the Pew Biomedical Scholars Program. *Pew Biomedical Scholars Conference.* Grand Cayman, West Indies (Nov. 5)

Gender Differences in Scholarly Self Citation. *Social-Personality Psychology Seminar.* University of Washington, (Oct. 22)

Plenary. Loosing sleep in a data-driven dream. *Moore-Sloan Data Science Environment Summit.* Suncadia Resort, Cle Elem, WA (Oct. 5)

Data Cartography: Managing Knowledge Networks. *SKKU Library and Information Science Distinguished Lecture Series*, Sungkyunkwan University, Seoul, South Korea (July 16)

Normalizing Eigenfactor Scores. *Thomson Reuters Webinar on the State of Journal Evaluation.* (June 23)

The Jargon Barriers of Science. *Santa Fe Institute Speaker Series.* Santa Fe, NM (March 17)

Data Cartography: using maps to navigate knowledge networks. *Cisco Data Science Speaker Series.* San Jose, CA (Jan. 27)

Data Cartography: using maps to navigate knowledge networks. *Pacific Northwest National Laboratory.* Richland, WA (Jan. 14)

The Economics and Structure of Scholarly Publishing. *Group Health Research Seminar.* Seattle, WA (Jan. 13)

2014

Data Cartography. *Boulder Analytics Fellows, Leeds School of Business.* University of Colorado, Boulder, CO (Nov. 6)

Mapping Jargon. *Center for Statistics & Social Sciences Seminar Series.* University of Washington, Seattle, WA (Oct. 5)

TechMining International Conference. Leiden, Netherlands (Sept. 2)

Gordon Research Conference on Science and Technology Policy Waterville Valley, NH (Aug 13)

Microsoft Faculty Summit. Remond, WA (July 16)

Gruter Institute for Law and Behavior. Squaw Valley, CA (May 19)

Department of Biology Annual Awards Banquet. University of Washington, Seattle, WA (April 8)

Biomedical & Health Informatics Lecture Series. University of Washington, Seattle, WA (Feb. 4)

2013 *School of Library & Information Science.* Bloomington, IN (Nov 18)

National Science Communication Institute. Seattle, WA (Nov 15)

Public Library of Science Article-level Metrics Workshop. San Francisco, CA (Oct 11)

Genome Sciences Seminar. University of Washington, Seattle, WA (Nov 12)

Association for Information Science and Technology. Montreal, Canada (Nov 5)

International Society of Managing & Technical Editors. Washington, DC (Aug 6)

Microsoft Faculty Summit. Redmond, WA (July 15)

Gruter Institute For Law & Behavioral Research. Squaw Valley, CA (May 21)

National Socio-Environmental Synthesis Center. University of Maryland, Annopolis, MD (April 9)

Aquatic & Fishery Science. University of Washington, Seattle, WA (March 22)

2012 *Gruter Institute For Law & Behavioral Research.* Stanford University, Palo Alto, CA (Oct 12)

Digital Science. London, UK (June 14)

International Conference on Academia & Publishing. Torino, Italy (May 31)

Gruter Institute For Law & Behavioral Research. Squaw Valley, CA (May 21)

2011 *Computer Science and Engineering Seminar Series*, University of Washington, Seattle, WA (Dec 1)

Graduate School of Library and Information Science, University of Illinois, Champaign—Urbana, IL (Nov 11)

Department of Computer Science, University of Colorado, Boulder, CO (Nov 3)

Harvard eScience Workshop, Harvard University, Boston, MA (Oct 24)

	Canadian Research Knowledge Network, Ottawa, Canada (Oct 5)
	Microsoft Faculty Summit, Redmond, WA (July 20)
	Open Repositories, University of Texas, Austin, TX (June 7)
	Society of Scholarly Publishing, Boston, MA (June 1)
	Law and Human Behavior - Innovation and Economic Growth, Gruter Institute, CA (May 26)
	Mapping and Measuring Scientific Output, Santa Fe, NM (May 10)
	Centers for Models of Life, Niels Bohr Institute, Copenhagen, Denmark (April 19)
	Applications in Network Theory - The Conference, NORDITA, Stockholm, Sweden (April 8)
2010	*The Changing Face of Scientific Research*, McGill University, Montreal, Canada (Dec 1)
	Assessing The Usage and Value of Scholarly and Scientific Output, Philadelphia, PA (Nov 10)
	Impact & Productivity Measurements in a Changing Research Environment, Washington, DC (Oct 27)
	ITHAKA Sustainable Scholarship 2010: Discovering Scholarly Content, New York, NY (Sept 28)
	Society for Scholarly Publishing 32nd Annual Meeting, San Francisco, CA (June 4)
	American Chemistry Society National Meeting, San Francisco, CA (March 24)
2009	*NSF Workshop: Scholarly Evaluation Metrics: Opportunities & Challenges*. Washington, DC (Dec 16)
	International Workshop on What is Evolution?.Kyoto University, Japan (Oct 17)
	Department of Physics, Umea University, Sweden (Oct 2)
	ALPSP International Conference, Oxford, UK (Sept 10)
	Council of Science Editors Annual Meeting, Pittsburgh, PA (May 3)
	Digital Research Symposium, Portland State University (April 29)
	BioOne, Washington, DC (April 17)
	University of California, Los Angeles, CA (Feb. 11)
2008	National Institute of Informatics, Tokyo, Japan (Nov. 25)
	National Institute for Materials Science, Tokyo, Japan (Nov 25)

	Yale Library and Faculty, Yale University (Nov 3)
	Center for Digital Research and Scholarship, Columbia University (Oct 30)
	Institute of Economic Research & Yukawa Institute of Theoretical Physics, Kyoto, Japan (Oct 21)
	American Library Association Annual Conference, Anaheim, CA (June 29)
	SLA International Conference, Seattle, WA (June 16)
	Council of Science Editors Annual Meeting, Vancouver, B.C. (May 19)
	HighWire Press, Stanford University (May 6)
	University of California, Los Angeles (May 5)
	Emerging Trends in Scholarly Publishing, National Press Club, Washington, D.C. (April 17)
	National Academy of Sciences, Washington, D.C. (March 18)
2007	European Science Foundation, University of Granada, Spain (Nov. 19)
	29th Annual ARCS Luncheon, Westin Hotel, Seattle, WA (Nov. 13)
	ARCS Auction Dinner, Conibear Shellhouse, University of Washington, Seattle, WA
2006	Berkman Center for Internet & Society, Harvard University, Cambridge, MA (May 4)

Conferences, Workshops and Meetings

2016	Metaknowledge Network. University of Chicago, IL (March 14-15)
2015	SciFoo. Google, Mountain View, CA (June 26-28)
	Metaknowledge Network. University of Chicago, IL (March 22-24)
	Metaknowledge Network. Asilomar, Pacific, CA (July 27-30)
2014	United States Patent Office, Washington, DC (Aug 4)

News

2016	The Washington Post. "New study finds that men are often their own favorite experts on any given subject." (Aug 1)
	Vice Media's Motherboard. "Study Finds Men Are More Likely Than Women to Cite Their Own Science Papers." (July 22)

	The London Times. "Women academics trail men (at shameless self-citation)." (July 16)
	Nature. "Men cite themselves more than women do." (July 5)
	Economist. "A scientific study of the importance of diagrams to science." (June 18)
	MIT Technology Review. "The First Visual Search Engine for Scientific Diagrams." (May 27)
	Microsoft Research. "Microsoft opens up online infrastructure to the research community." (Feb 23)
	UW iSchool. "UW team takes second place in Microsoft search challenge." (Feb 24)
	Microsoft Research. "Microsoft opens up online infrastructure to the research community." (Feb 23)
	Chronicle of Higher Education. ''The rise of the megajournal" (Jan 13)
2015	UW eScience. ''UW Research Science Team Takes 2nd in WSDM Cup" (Dec 1)
	Bloomberg News. "Patents By WomenBetter In The Life Sciences?" (Nov 12)
	Inside Higher Ed. ''Men Who Admire Their Own Work." (Aug. 25)
	FiveThirtyEight. ''In Science, It Matters that Women Come Last." (Aug. 5)
	UW iSchool. "DataLab at the University of Washington iSchool." (June 15)
2014	UW iSchool. "Big Data expert Jevin West joins the iSchool as assistant professor." (Jan 5)

Funding

2016	(PI) Measuring scholarly influence. Pew Charitable Trust ($18,000)
	(RA) Incorporating citation recommendation into Semantic Scholar. Allen Institute for Artificle Intelligence ($14,000)
	(PI) Improving market function in Open Access publishing through transparent comparison of journal price and quality. Sloan Foundation ($124,370)
	(PI) Measuring student transfer attrition and performance at a large public university. Royalty Research Fund, UW ($39,404)
	(PI) National Science Foundation Career Proposal, NSF (in prep)
	(PI) Mapping and Recommending Schoarly Articles. JSTOR ($110,000)

2015	(PI) Diversification dynamics of scientific ideas using small clustering for community detection. Metaknowledge Network, Templeton Foundation ($35,000)
	(PI) Inferring the hierarchical structure of citation networks to improve semantic search. Metaknowledge Network, Templeton Foundation ($109,172)
	(PI) Measuring the Influence Pew Scholars. Pew Charitable Trust ($24,044)
	(RA) Mapping student trajectories. UW Grad School ($14,000)
	(AWS) Recommendation as a service ($5,000)
	(PI) Data Science Education. Cisco ($2,000)
2014	(PI) Scholarly recommendation of PLoS content. Public Library of Science ($24,000)
	(RA) Metaknowledge Network, Templeton Foundation ($14,000)
	(co-PI) Blackrock Research ($49,251)
	(PI) Auto-classifying scholarly content. Microsoft ($40,000)
	(co-PI) Metaknowledge Network, Templeton Foundation ($15,000)
	(co-PI) Eigenfactor Project. CoMotion, UW ($5,000)
2013	(PI) Evaluating scholarly influence. Kauffman Foundation ($18,000)
	(co-PI) DataLab. Costco ($60,000)
2012	(PI) Postdoctoral Fellow. Center for Commercialization, UW ($36,000)
2011	(co-PI) Mapping citation networks over time. JSTOR ($90,000)

Broader Impacts

The Self-Citation paper is in the top 1% of all papers scored by Altmetric [link, and list after citations].
The Viziometric paper is in the top 5% of all papers scored by Altmetric [link, and list after citations].

Teaching

I am actively involved in developing curricula in Data Science at the University of Washington at the undergraduate and graduate level. I am also founded the Coursector.org project, which looks at historical transcript data as a way of better understanding student trajectories.

Courses

2017	INFX 574: Machine Learning and Econometrics (Winter)

2016	INFX 575: Data Scaling, Applications and Ethics (Spring)
	INFO 370: Introduction to Data Science (Fall)
2015	INFO 370: Introduction to Data Science (Fall)
	Introduction to Data Science & Management (Summer, Sungkyunkwan University)
	INFX 575: Data Science III: Scaling, Applications, & Ethics (Spring)
	INFO 370: Introduction to Data Science (Spring)
2014	INSC 570: Research Design (Fall)
	INFX 598: Advanced Methods in Data Science (Spring)
	INFO 498: Introduction to Data Science (Spring)
2013	INSC 570: Research Design (Fall)

Curriculum Development

Undergraduate Option in Data Science, UW Informatics Program (2013 - present)

Masters in Data Science, UW Professional & Continuing Education (2014 - present)

Introduction to Data Science, UW iSchool (2014 - present)

MSIM Data Science Series, UW iSchool (2013 - present)

Summer Teaching Institute, Seattle School District (Summer 2009)

Huckabay Teaching Seminar (Winter 2009), Howard Hughs RA (Summer 2006)

Advising

PhD	Ian Wesley-Smith, Information School (2015 - present)
	Ryan McGee, Biology (2015 - present)
	Poshen Lee, Computer Science (2014 - present)
	Lavi Aulck, Information School (2014 - present)
	Jason Portenoy, Information School (2013 - present)
	Ray Hong, HCDE (2013 - present)
	Amit Misra, Astronomy (2013 - 2014)
MS	Prerak Pradhan, MSIM (2013-2015)
	Nishant Sinha, MSIM (2013-2015)
	Kelly Toskey, MLIS (2014 - 2015)

	Terri Northcut, MLIS (2014)
BS	Nishant Velagapudi, Informatics (2016 - present)
	Logan Walls, Informatics (2016 - present)
	Patrick Spieker, Computer Science (2015 - present)
	Katherine Zhu, Informatics (2015 - present)
	Nick Thorpe, Informatics (2015)
	Jeff Giorgi, Informatics (2013 - 2014)

Guest Lectures

2016	INFX561: Visualization Design (April 25)
2015	INFO 372: Introduction to Data Science (MLIS, MSIM) (Dec. 2)
	INFO 200: Intellectual Foundations of Informatics (Oct. 28)
	INSC 570 Research Design (Oct. 23)
	SKKU Data Science Camp, UW (Feb 2-12)
2014	UW iSchool Preview Day Lecture (Nov. 15)
	Network Science, University Colorado Leeds School of Business (Nov. 7)
	SKKU Big Data Lecture, UW (Aug 19)
	HCDE 411: Information Visualization (Winter)
	HCDE 511: Information Visualization (Feb. 26)
2013	INFO 200: Introduction to Information Science (Fall)
	HCDE 411: Information Visualization (Winter)
2009	BIS 232: Visualizing Quantitative Data, UW Bothell (Feb 25)
2008	BIOL 113: Diversity in Learning (May 22)
2007	BIOL 492: The Teaching of Biology, UW (Spring)
2006	BIOL 429: Models in Biology, UW (Dec 6)
	BIOL 510: Seminar in Mathematical Biology, UW (May 11)
2004	AP Calculus, Logan High School (May 5)

Teaching Assistant

2009	BIOL 354: Foundations in Evolution & Systematics, UW (Spring)
2007	BIOL 462: Advanced Animal Physiology, UW (Fall)
2006	BIOL 481: Experimental Evolutionary Ecology (Fall)
2005	BIOL 462: Advanced Animal Physiology, UW (Fall)
2004	BIOL 2010: Human Anatomy, USU (Spring)
	BIOL 4400: Plant Physiology, USU (Fall)
2003	BIOL 2010: Human Anatomy, USU (Spring)

BIOL 4400: Plant Physiology, USU (Fall)

Service

UW iSchool Committees

Informatics Program Committee, UW iSchool (2015 - present)

PhD Admissions, UW iSchool (2014 - 2015)

Informatics Admissions, UW iSchool (2013 - 2014)

Hiring Committees

Data Science (2016 - present)

Information Assurance & Cybersecurity (2014 - 2015)

UW Committees

Faculty Council on University Libraries, UW (2015 - present)

eScience Steering Committee, UW (2014 - present)

eScience Education Working Group, UW (2014 - present)

Data Science Seminar Committee, UW (2014 - present)

Peer Review, Journals

Journal of the Association for Information Science & Technology (Editorial Board), Science Advances, Economic Inquiry, Journal of Informetrics, Scientometrics, PLoS One, eLife, Information Management, R Journal, PeerJ, Knowledge-based Systems, BioScience, PLoS Computational Biology, Plant Cell & Environment, Journal of Information Technology

Peer Review, Conferences

ASIS&T, WWW