

Sam Way

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Education	Ph.D. Computer Science, University of Colorado at Boulder Advisor: Aaron Clauset Dissertation: "Systematic Inequalities in the Composition and Productivity of Computer Science Faculty" IGERT fellow in the program of Interdisciplinary Quantitative Biology (IQ Biology)	2012–2017
	M.S. Electrical Engineering, University of Nebraska–Lincoln Advisors: Khalid Sayood and Ozkan Ufuk Nalbantoglu Thesis: "Classification of Genomic Sequences by Latent Semantic Analysis"	2011–2012
	B.S. Electrical Engineering, University of Nebraska–Lincoln B.S. Computer Engineering, University of Nebraska–Lincoln	2005–2010
Professional Experience	Spotify — New York, NY Research Scientist, Tech Research	May 2019 – Present
	Facebook — Menlo Park, CA Research Scientist Intern, Core Data Science	Summer 2017
	Spotify — New York, NY Research Scientist Contractor Research Scientist Intern	2018 Summer 2016
	Red Cocoa II, LLC. — Lincoln, Nebraska Software Engineer, Embedded Systems	2009–2012
	Interact Incorporated — Lincoln, Nebraska Software Engineering Intern	Spring 2009
	Sandhills Publishing — Lincoln, Nebraska Software Engineering Intern	2007–2009
Academic Experience	University of Colorado at Boulder Postdoctoral Research Associate, Computer Science Department Environmental effects on researcher productivity; methods for automated data collection. Impacts of interdisciplinary institutions on individuals' research diversity. Dynamics of musical identity: when and why musical preferences form.	2017–2019
	University of Colorado at Boulder Graduate Research Assistant, Computer Science Department Science of science: gender inequality in faculty hiring; determinants of scholarly productivity. Social networks: online social network assembly. Human health: health signals in the human microbiome; structural modifications to cardiac networks. Biomedical: active learning frameworks for automated genome engineering; genomic analysis.	2012–2017
	University of Nebraska–Lincoln Graduate Research Assistant, Electrical Engineering Department Classification of genomic sequences, metric development. High-dimensional data visualization.	2010–2012
	University of Nebraska–Lincoln Undergraduate Research Assistant, Electrical Engineering Department Information theoretic analysis of genomic sequences and genome assembly	2009–2010
Peer-reviewed Publications	[14] S. F. Way, A. C. Morgan, D. B. Larremore, and A. Clauset, "Productivity, prominence, and the effects of academic environment." <i>PNAS</i> , 116 (22) 10729-10733 (2019).	
	[13] S. F. Way, S. Gil, I. Anderson, and A. Clauset, "Environmental changes and the dynamics of musical identity," <i>Proc. Int'l Conf. on Web and Social Media</i> (2019).	
	[12] A. C. Morgan, D. Economou, S. F. Way, and A. Clauset "Prestige drives epistemic inequality in the diffusion of scientific ideas," <i>EPJ Data Science</i> 7:40 (2019).	
	[11] A. C. Morgan, S. F. Way, and A. Clauset "Automatically assembling a full census of an academic field." <i>PLOS One</i> 13(8): e0202223 (2018).	

- [10] D. Citron and **S. F. Way**, “Network assembly of scientific communities of varying size and specificity.” *Journal of Infometrics* 12.1: 181-190 (2018).
- [9] **S. F. Way**, A. C. Morgan, A. Clauset, and D. B. Larremore “The misleading narrative of the canonical faculty productivity trajectory.” *PNAS*, 114 (44) E9216-E9223 (2017).
- [8] S. Tao, **S. F. Way**, ..., H. Ashikaga, “Ablation as targeted perturbation to rewire communication network of persistent atrial fibrillation.” *PLOS One*, 12(7): e0179459 (2017).
- [7] **S. F. Way**, D. B. Larremore, and A. Clauset, “Gender, productivity, and prestige in computer science faculty hiring networks.” *Proc. 25th Int’l Conf. on World Wide Web* (2016).
- [6] S. Lumbreras, P. Mealy, C. Verzijl, and **S. F. Way**, “Quantifying convergence in the sciences.” *Pensamiento*, 71(269): 1383–1399 (2016).
- [5] R. T. Gill, A. L. Halweg-Edwards, A. Clauset, and **S. F. Way**, “Synthesis aided design: The biological design-build-test engineering paradigm?” *Biotechnology Bioengineering*, 113(1), 7–10 (2016).
- [4] A. Z. Jacobs, **S. F. Way**, J. Ugander, and A. Clauset, “Assembling thefacebook: Using heterogeneity to understand online social network assembly.” *Proc. ACM Web Science Conference* (2015).
- [3] Z. Xu, D. Malmer, M. Langille, **S. F. Way**, and R. Knight, “Which is more important for classifying microbial communities: who’s there or what they can do?” *ISME J. 2014 Dec*; 8(12): 2357–2359 (2014).
- [2] O. U. Nalbantoglu, **S. F. Way**, S. H. Hinrichs, and K. Sayood, “RALphy: Phylogenetic classification of metagenomics samples using iterative refinement of relative abundance index profiles.” *BMC Bioinformatics*, 12(1), 41 (2011).
- [1] D. J. Russell, **S. F. Way**, A. K. Benson, and K. Sayood, “A grammar-based distance metric enables fast and accurate clustering of large sets of 16S sequences.” *BMC Bioinformatics*, 11(1), 601 (2010).

Manuscripts
In Preparation

- [3] **S. F. Way**, J. Garcia-Gathright, and H. Cramer, “Local trends in global music streaming,” under review.
- [2] **S. F. Way**, “Safe leads and losing strategy in professional basketball,” in preparation.
- [1] A. C. Morgan, **S. F. Way**, M. Galesic, D. B. Larremore, and A. Clauset, “Gender and the impact of parenthood on faculty productivity,” in preparation.

Service

Co-organizer of Denver/Boulder D3.js meetup
 Database of University Parental Leave Policies: <https://aaronclauset.github.io/parental-leave/>
 Int’l Conf. on the World Wide Web (WWW), Program Committee: 2016, 2017, 2018
 Int’l Conf. on Web and Social Media (ICWSM), Program Committee: 2016, 2017, 2018
 Int’l Conf. on Computational Social Science (IC2S2), Program Committee: 2017, 2018
 Int’l Conf. on Network Science (NetSci), Program Committee: 2017

Presentations
& Teaching

S. F. Way, “The globalization of music.”
 Canadian Institute for Advanced Research Forum, Paris, FR, Oct 2018.

S. F. Way, “Environmental Changes and the Dynamics of Musical Identity.”
 International Conference on Computational Social Science, Evanston, US, Jul 2018.

S. F. Way, “Visual Storytelling in Computational Social Science.”
 Data Viz Denver+Boulder, Boulder, US, Jun 2018.

S. F. Way, “Complex Systems in Science of Science.”
 International Conference on Network Science, Santa Fe, US, Jun 2018.

S. F. Way, “Academic Environment and the Social Effects on Scholarly Productivity.”
 International Conference on Network Science, Indianapolis, US, Jun 2017.

S. F. Way, "The misleading narrative of the canonical faculty productivity trajectory." International Conference on Web and Social Media, Montreal, Canada, May 2017.

S. F. Way, "Trends and Gaps in Scholarly Productivity of Computer Science Faculty." International Conference on Computational Social Science, Evanston, US, Jun 2016.

D. Citron, L. Brandenberger, and S. F. Way, "Measuring Topological Transitions in Scientific Collaboration Networks Using Topic Modeling for Subfield Detection." International Conference on Computational Social Science, Evanston, US, Jun 2016.

S. F. Way, "Gender, Productivity, and Prestige in Computer Science Faculty Hiring Networks." International World Wide Web Conference, Montreal, Canada, Apr 2016.

S. F. Way, "Gender Inequality in Computer Science." International Conference on Network Science, Zaragoza, Spain, Jun 2015.

S. F. Way and A. Robbins-Pianka, "Optimization of Exogenous Pathways." Univ. of Colorado Biofrontiers' Big Data Symposium, Boulder, US, May 2014.

S. F. Way and J. Azofeifa, "Introduction to Machine Learning." Univ. of Colorado IQ Biology Bootcamp Sessions, Boulder, US, Aug 2014.

Patents	<p>US 13/954925, Europe PCT US2013/052797: Classification of Genomic Sequences by Latent Semantic Analysis</p> <p>US (filing): Guided Therapeutic Intervention for Rewiring Functional Cardiac Networks in Human Atrial Fibrillation</p> <p>US (filing): Systems and Methods for Crawling Web Pages and Parsing Relevant Information Stored in Web Pages</p>						
Other Experience	<table border="0" style="width: 100%;"> <tr> <td style="padding-right: 40px;">Complex Systems Summer School, Santa Fe Institute</td> <td style="text-align: right;">Summer 2015</td> </tr> <tr> <td style="padding-right: 40px;">Engineering in China (University of Nebraska study abroad program)</td> <td style="text-align: right;">Summer 2008</td> </tr> <tr> <td style="padding-right: 40px;">University of Nebraska Jazz Ensemble and Combos (Bassist)</td> <td style="text-align: right;">2005–2008</td> </tr> </table>	Complex Systems Summer School, Santa Fe Institute	Summer 2015	Engineering in China (University of Nebraska study abroad program)	Summer 2008	University of Nebraska Jazz Ensemble and Combos (Bassist)	2005–2008
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