

# Sam Way

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| Professional Experience    | Spotify — Boulder, CO<br>Research Manager<br>Senior Research Scientist<br>Research Scientist   | August 2022 – December 2023<br>March 2022 – August 2022<br>May 2019 – March 2022 |
|                            | Facebook — Menlo Park, CA<br>Research Scientist Intern, Core Data Science  | Summer 2017  |
|                            | Spotify — New York, NY<br>Research Scientist Contractor<br>Research Scientist Intern   | 2018<br>Summer 2016  |
|                            | Red Cocoa II, LLC. — Lincoln, Nebraska<br>Software Engineer, Embedded Systems  | 2009–2012  |
|                            | Interact Incorporated — Lincoln, Nebraska<br>Software Engineering Intern   | Spring 2009  |
|                            | Sandhills Publishing — Lincoln, Nebraska<br>Software Engineering Intern  | 2007–2009  |
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| Education                  | Ph.D. Computer Science, University of Colorado at Boulder<br>Advisor: Aaron Clauset<br>Dissertation: “Systematic Inequalities in the Composition and Productivity of Computer Science Faculty”<br>IGERT fellow in the program of Interdisciplinary Quantitative Biology (IQ Biology)   | 2012–2017  |
|                            | M.S. Electrical Engineering, University of Nebraska–Lincoln<br>Advisors: Khalid Sayood and Ozkan Ufuk Nalbantoglu<br>Thesis: “Classification of Genomic Sequences by Latent Semantic Analysis”   | 2011–2012  |
|                            | B.S. Electrical Engineering, University of Nebraska–Lincoln<br>B.S. Computer Engineering, University of Nebraska–Lincoln   | 2005–2010  |
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| Academic Experience        | University of Colorado at Boulder<br>Postdoctoral Research Associate, Computer Science Department<br>Environmental effects on researcher productivity; methods for automated data collection.<br>Impacts of interdisciplinary institutions on individuals’ research diversity.<br>Dynamics of musical identity: when and why musical preferences form.   | 2017–2019  |
|                            | University of Colorado at Boulder<br>Graduate Research Assistant, Computer Science Department<br>Science of science: gender inequality in faculty hiring; determinants of scholarly productivity.<br>Social networks: online social network assembly.<br>Human health: health signals in the human microbiome; structural modifications to cardiac networks.<br>Biomedical: active learning frameworks for automated genome engineering; genomic analysis. | 2012–2017  |
|                            | University of Nebraska–Lincoln<br>Graduate Research Assistant, Electrical Engineering Department<br>Classification of genomic sequences, metric development.<br>High-dimensional data visualization.   | 2010–2012  |
|                            | University of Nebraska–Lincoln<br>Undergraduate Research Assistant, Electrical Engineering Department<br>Information theoretic analysis of genomic sequences and genome assembly   | 2009–2010  |
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| Peer-reviewed Publications | [23] <b>S. F. Way</b> , D. Mazur, R. Kupferman, M. Walsh, A. Tizé, and B. Lacker, “Exploring Local Music’s Place in Global Streaming.” To appear in <i>Proc. ACM Web Science Conference</i> (2024).  |  |
|                            | [22] J. Jiang, A. Ponnada, A. Li, B. Lacker, and <b>S. F. Way</b> , “Understanding the Consumption of New Music Releases from the Perspectives of Genres.” To appear in <i>Proc. ACM Web Science Conference</i> (2024).  |  |

- [21] B. Lacker and **S. F. Way**, "Socially-motivated Music Recommendation." To appear in *Proc. Int'l Conf. on Web And Social Media* (2024).
- [20] C. Hanson, J. Anderton, **S. F. Way**, I. Anderson, S. Wolf, and A. Wang, "Time after Time: Longitudinal Trends in Nostalgic Listening." *Proc. Int'l Conf. on Web And Social Media* (2022).
- [19] L. Mok, **S. F. Way**, L. Maystre, and A. Anderson, "The Dynamics of Exploration on Spotify." *Proc. Int'l Conf. on Web And Social Media* (2022).
- [18] S. Petridis, N. Daskalova, S. Mennicken, **S. F. Way**, P. Lamere, and J. Thom, "TastePaths: Enabling Deeper Exploration and Understanding of Personal Preferences in Recommender Systems." *Proc. Int'l Conf. on Intelligent User Interfaces*, 120-133 (2021).
- [17] B. Richardson, J. Garcia-Gathright, **S. F. Way**, J. Thom, and H. Cramer, "Towards Fairness in Practice: a Practitioner-Oriented Rubric for Evaluating Fair ML Toolkits." *Proc. CHI Conf. on Human Factors in Computing Systems* (2021).
- [16] A. C. Morgan, **S. F. Way**, M. Hoefer, D. B. Larremore, M. Galesic, and A. Clauset, "The unequal impact of parenthood in academia." *Science Advances*, 7 (9):eabd1996 (2021).
- [15] **S. F. Way**, J. Garcia-Gathright, and H. Cramer, "Local Trends in Global Music Streaming." *Proc. Int'l Conf. on Web and Social Media*, (2020).
- [14] **S. F. Way**, A. C. Morgan, D. B. Larremore, and A. Clauset, "Productivity, prominence, and the effects of academic environment." *PNAS*, 116 (22) 10729-10733 (2019).
- [13] **S. F. Way**, S. Gil, I. Anderson, and A. Clauset, "Environmental changes and the dynamics of musical identity," *Proc. Int'l Conf. on Web and Social Media* (2019).
- [12] A. C. Morgan, D. Economou, **S. F. Way**, and A. Clauset "Prestige drives epistemic inequality in the diffusion of scientific ideas," *EPJ Data Science* 7:40 (2019).
- [11] A. C. Morgan, **S. F. Way**, and A. Clauset "Automatically assembling a full census of an academic field." *PLOS One* 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. Lumberras, 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).

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|                               | <p>[1] D. J. Russell, <b>S. F. Way</b>, A. K. Benson, and K. Sayood, "A grammar-based distance metric enables fast and accurate clustering of large sets of 16S sequences." <i>BMC Bioinformatics</i>, 11(1), 601 (2010).</p>   |
| Manuscripts<br>In Preparation | <p>[1] B. Koch, J. Anderton, and <b>S. F. Way</b>, "What is love? Characterizing significant musician-fan relationships," in preparation.</p>   |
| Service                       | <p>Co-organizer of Denver/Boulder data visualization meetup</p> <p>Database of University Parental Leave Policies: <a href="https://aaronclauset.github.io/parental-leave/">https://aaronclauset.github.io/parental-leave/</a></p> <p>Reviewer for: Int'l Conf. on the World Wide Web (WWW; now The Web Conf), Int'l Conf. on Web and Social Media (ICWSM), Int'l Conf. on Knowledge Discovery and Data Mining (KDD), Int'l Conf. on Computational Social Science (IC2S2), Int'l Conf. on Network Science (NetSci), Proceedings of the National Academy of Sciences (PNAS), Science Advances, Nature Human Behavior, EPJ Data Science, and others.</p>  |
| Presentations<br>& Teaching   | <p><b>S. F. Way</b>, "Local Trends in Global Music Streaming."<br/>International Conference on Web and Social Media, Virtual, Jun 2020.</p> <p><b>S. F. Way</b>, "Visualizing Complex Science." (Keynote Presentation)<br/>Symposium for Data Science and Statistics, Virtual, Jun 2020.</p> <p><b>S. F. Way</b>, "The globalization of music."<br/>Canadian Institute for Advanced Research Forum, Paris, FR, Oct 2018.</p> <p><b>S. F. Way</b>, "Environmental Changes and the Dynamics of Musical Identity."<br/>International Conference on Computational Social Science, Evanston, US, Jul 2018.</p> <p><b>S. F. Way</b>, "Visual Storytelling in Computational Social Science."<br/>Data Viz Denver+Boulder, Boulder, US, Jun 2018.</p> <p><b>S. F. Way</b>, "Complex Systems in Science of Science."<br/>International Conference on Network Science, Santa Fe, US, Jun 2018.</p> <p><b>S. F. Way</b>, "Academic Environment and the Social Effects on Scholarly Productivity."<br/>International Conference on Network Science, Indianapolis, US, Jun 2017.</p> <p><b>S. F. Way</b>, "The misleading narrative of the canonical faculty productivity trajectory."<br/>International Conference on Web and Social Media, Montreal, Canada, May 2017.</p> <p><b>S. F. Way</b>, "Trends and Gaps in Scholarly Productivity of Computer Science Faculty."<br/>International Conference on Computational Social Science, Evanston, US, Jun 2016.</p> <p>D. Citron, L. Brandenberger, and <b>S. F. Way</b>, "Measuring Topological Transitions in Scientific Collaboration Networks Using Topic Modeling for Subfield Detection."<br/>International Conference on Computational Social Science, Evanston, US, Jun 2016.</p> <p><b>S. F. Way</b>, "Gender, Productivity, and Prestige in Computer Science Faculty Hiring Networks."<br/>International World Wide Web Conference, Montreal, Canada, Apr 2016.</p> <p><b>S. F. Way</b>, "Gender Inequality in Computer Science."<br/>International Conference on Network Science, Zaragoza, Spain, Jun 2015.</p> <p><b>S. F. Way</b> and A. Robbins-Pianka, "Optimization of Exogenous Pathways."<br/>Univ. of Colorado Biofrontiers' Big Data Symposium, Boulder, US, May 2014.</p> <p><b>S. F. Way</b> and J. Azofeifa, "Introduction to Machine Learning."<br/>Univ. of Colorado IQ Biology Bootcamp Sessions, Boulder, US, Aug 2014.</p> |
| 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>  |

US (filing): Systems and Methods for Crawling Web Pages and Parsing Relevant Information  
Stored in Web Pages

Other  
Experience

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| 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   |