# Sam Way

Professional Experience

Spotify — New York, NY + Boulder, CO (Remote)

Research Manager
Senior Research Scientist
2022—Present
2022
Research Scientist
2019—2022

Facebook - Menlo Park, CA

Research Scientist Intern, Core Data Science Summer 2017

Spotify - New York, NY

Research Scientist Contractor 2018
Research Scientist Intern Summer 2016

Red Cocoa II, LLC. — Lincoln, NE

Software Engineer, Embedded Systems 2009–2012

Sandhills Publishing — Lincoln, NE

Software Engineering Intern 2007–2009

Education

### Ph.D. Computer Science, University of Colorado at Boulder

2012-2017

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)

M.S. Electrical Engineering, University of Nebraska-Lincoln

2011-2012

Advisors: Khalid Sayood and Ozkan Ufuk Nalbantoglu

Thesis: "Classification of Genomic Sequences by Latent Semantic Analysis"

B.S. Electrical Engineering, University of Nebraska–Lincoln 2005–2010

B.S. Computer Engineering, University of Nebraska-Lincoln

Academic Experience

#### University of Colorado at Boulder

2017-2019

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.

#### University of Colorado at Boulder

2012-2017

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.

#### University of Nebraska-Lincoln

2010-2012

Graduate Research Assistant, Electrical Engineering Department Classification of genomic sequences, metric development. High-dimensional data visualization.

## University of Nebraska-Lincoln

2009-2010

Undergraduate Research Assistant, Electrical Engineering Department Information theoretic analysis of genomic sequences and genome assembly

# Peer-reviewed Publications

- [20] C. Hanson, J. Anderton, S. F. Way, I. Anderson, S. Wolf, 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, 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, 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. 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).

Patents

- US 13/954925, Europe PCT US2013/052797: Classification of Genomic Sequences by Latent Semantic Analysis
- US (filing): Guided Therapeutic Intervention for Rewiring Functional Cardiac Networks in Human Atrial Fibrillation
- US (filing): Systems and Methods for Crawling Web Pages and Parsing Relevant Information Stored in Web Pages

Other Experience	Symposium on Data Science & Statistics Keynote Speaker. Talk: "Visualizing Complex Science"	Summer 2020
	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