# SAM HANSEN

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#### EXPERIENCE

2019-Present Mathematics & Statistics Librarian

University of Michigan, Ann Arbor

2009-Present Director & Podcast Producer

ACMESCIENCE.COM

2019-Present Database Developer

University of Wisconsin, Madison

2023 Visiting Scholar

Institute of Mathematical and Statistical Innovation

University of Chicago

2017-2019 Full Stack Developer (PodcastRE)

University of Wisconsin, Madison

2018 Research Guide Intern

Smithsonian National Museum of Natural History Library

2013-2014 Division Operations Analyst

EPIC SYSTEMS

2008-2011 Graduate Student Instructor (Mathematics)

University of Nevada, Las Vegas

# EDUCATION

2017-2019 University of Wisconsin, Madison

Masters of Library and Information Science

Advisor: Dorothea Salo

2008-2011 University of Nevada, Las Vegas

Masters of Science: Pure Mathematics

Thesis: Zero-Sum Magic and Null Sets of Planar Graphs

Advisor: Prof. Ebrahim Salehi

2005-2008 University of Wisconsin, Green Bay

Bachelor of Science: Mathematics (Minor: Humanistic Studies)

# **PUBLICATIONS**

#### ARTICLES

2022 Science Librarianship and Social Justice: Part Four Capstone Concepts

Issues in Science and Technology Librarianship

Authors: Isabel Altamirano, Jeffra D. Bussmann, Sam Hansen, Nastasha E. Johnson, and Gr Keer

2021 Science Librarianship and Social Justice: Part Three Advanced Concepts

Issues in Science and Technology Librarianship

Authors: Isabel Altamirano, Jeffra D. Bussmann, Sam Hansen, Nastasha E. Johnson, and Gr Keer

2021 PodcastRE Analytics: Studying the Norms, Styles, and Cultures of an Evolving Medium

Digital Humanities Quarterly

Authors: Eric Hoyt, JJ Bersch, Susan Noh, Sam Hansen, Jacob Mertens, and Jeremy Morris

2020 Science Librarianship and Social Justice: Part Two Intermediate Concepts

Issues in Science and Technology Librarianship

Authors: Isabel Altamirano, Jeffra D. Bussmann, Sam Hansen, Nastasha E. Johnson, and Gr Keer

2020 Science Librarianship and Social Justice: Part One Foundational Concepts

Issues in Science and Technology Librarianship

Authors: Isabel Altamirano, Jeffra D. Bussmann, Sam Hansen, Nastasha E. Johnson, and Gr Keer

2019 The PodcastRE Project: Curating and Preserving Podcasts and their Data

Journal of Radio and Audio Media

Authors: Jeremy Morris, Sam Hansen, Eric Hoyt

Zero-sum magic and null sets of planar graphs

Journal of Combinatorial Mathematics and Combinatorial Computing

Authors: Ebrahim Salehi, Sam Hansen

# CHAPTERS

Upcoming

2024

Searching for Similarity: Computational Analysis and the U.S. Film Industry

Trade Press of the Early 1920s

Global Movie Magazine Networks

Authors: Eric Hoyt, Ben Pettis, Lesley Stevenson, and Sam Hansen

2021 The Feed is the Thing

Saving New Sounds

2021 Can a Hammer Categorize Highly Technical Articles?

Machine Learning for Cross-Disciplinary Research

#### PRESENTATIONS

INVITED

Sep 2023 Stories as a tool for Mathematical Belonging Spectra LGBTQ+ Mathematics Conference 2023 - Plenary June 2023 Science Librarianship and Social Justice Concepts 2023 ACRL Science & Technology Section Annual Program With Isabel Altamirano, Jeffra D. Bussmann, Sam Hansen, Nastasha E. Johnson, and Gr Keer May 2023 Panel on Unique teaching ventures: Making inroads in new areas MLA|SLA 2023 With Barbara Wetzel and Sarah Siddiqui May 2023 Beyond the impact factor: How do you show success beyond a single number? Special Libraries Association Annual Conference 2020 (Panel Co-Convener with Lauren Gala) May 2023 Operationalization, MOU Automation, and Just Where Exactly is the Data: Stories about Overcoming Access Issues for Text and Data Mining Data Colloquium on Text and Data Mining in Libraries April 2023 The Hidden Narratives of Mathematics Brown Horizons Seminar January 2023 Panel on the Future of AMS Meetings 2023 Joint Mathematics Meetings With Shanna Dobson, Abba Gumel, Michelle Manes, and Sara Rezvi August 2022 Branding and Self-Marketing American Statistical Association Diversity Workshop and Mentoring Program July 2022 Engagement Strategies for Librarian & Mathematician Collaboration Special Libraries Association Annual Conference 2020 (Panel Co-Convener with Anya Bartelmann) Apr 2022 Bridging the Divide: Connecting Mathematics and Society through Stories 2022 Allegheny Mountain MAA Section Meeting Apr 2022 A Lab of Geometry and its Embedded Librarian 2022 Joint Mathematics Meeting Saving New Sounds Roundtable Mar 2022 Association for Recorded Sound Webinars With Jeremy Morris, Eric Hoyt, Jennifer Wang, and Susan Noh Accessing Mathematics: Blind Mathematicians, Deaf Mathematicians, and Libraries Aug 2021 Special Libraries Association Annual Conference 2021 (Panel Co-Convener with Emma Moore) Aug 2021 Academic Authors Showcase: The Feed is the Thing Special Libraries Association Annual Conference 2021 Feb 2021 Science Librarianship and Social Justice Concepts

STS Hot Topics Discussion

With Isabel Altamirano, Jeffra D. Bussmann, Nastasha E. Johnson, and Gr Keer

Dec 2020 Is Science Librarianship Right for Me?

ACRL STS Webinar

With Kimberley Bailey, Patricia Hartman, Matt Torrence, and Mea Warren (Panelist)

Nov 2020 Systematic over-time study of the similarities and differences in research across mathematics

and the sciences

**CADRE Fellows Webinars** 

Oct 2020 Mathematics Beyond the Academy

Special Libraries Association Annual Conference 2020 (Panel Co-Convener with Lauren Gala)

Sep 2020 Comparative analysis of legacy and emerging journals in mathematical biology

**CADRE Fellows Webinars** 

With Marisa Conte and Scott Martin

Jul 2020 STEM Podcasters Round Table

Intelligent Speech

With Chad Davies, Raven Forrest, Ben Jacobs, Raquel Montanez-Gonzalez, and Teagan Phillips

Mar 2020 +10 to Charisma: MinMax-ing your way to better stories

The Collective 2020

Oct 2019 Audio and the Academic Career

Sound Education 2019 (Panelist)

Sep 2019 Mathematical Biology and Systematic Mathematical Research Analysis

ISSI 2019

Jun 2019 Data on Demand: Real World Examples of Using Web of Science Data for Analytics

Special Libraries Association Annual Conference 2020 (Co-presented with Kristen Faeth)

Jun 2019 Panel on Non-Faculty Mathematical Careers

LG&TBQ (Panelist)

Nov 2018 Cycle of Mathematics: Development to Publication to Inspiration

Sound Education 2018

July 2018 Storytelling in the Mathematical Domain

Girls Talk Math

University of Maryland, College Park

Nov 2011 Tell More Stories: Why We Need More Storytelling in Mathematics

Mathematics Department University of Arkansas

Nov 2010 Mathematical Podcasting

IMA Early Career Mathematicians Conference With Peter Rowlett

Nov 2010 Bacon, Small-Worlds, and Your Important Friends: Social Network Theory Explained

University of Leicester Math Society & University of Birmingham Math Society

With Peter Rowlett

Nov 2010 Maths and Computing History Tour of Nottingham

University of Greenwich Math Society

With Peter Rowlett

#### CONTRIBUTED

Sep 2023 A Word Problem: the hows and whys of mathematical communication

NASW 2023

With Kenna Hughes-Castleberry, Noelle Sawyer, and Sadie Witkoski

Mar 2023 Shaping a New Future: Forging Social Justice Work in Multiple Disciplines

ACRL 2023

Roundtable Convenor with Isabel Altamirano, Jeffra D. Bussmann, Nastasha E. Johnson, and Gr Keer

Dec 2022 Don't Call It A Comeback (I've Been Here for Years) - The Timeless Nature of Mathematics

Research

Trans Math Day 2022

Apr 2022 A Match Made in the Stacks: Mathematician and Librarian Collaborations Special Session

Joint Mathematics Meetings 2022 Co-Organized with Anya Bartelmann

Nov 2021 Our Social and Mathematical World: A Tale of Bidirectional Impacts

University of Michigan, Ann Arbor Math Club

April 2021 Using CADRE to support Large Scale Bibliometric Studies

LIS B Conference

Feb 2021 Can you tell me a story? - Why and How we should tell more stories in mathematics

University of Michigan, Ann Arbor Math Club

Feb 2021 Using Empathy Maps to Explore Social Justice Terminology

Design for Digital 2021

With Isabel Altamirano, Jeffra D. Bussmann, Nastasha E. Johnson, and Gr Keer

Oct 2020 Can you tell me a story? - Why and How we should tell more stories in mathematics

Talking Math With Your Friends

Mar 2020 Campaigning Your Way to Useable and Clean Data

The Collective 2020

With Meredith Hale, Monica Ihli, and Allison Kittinger

July 2019 What 117 years of aging data tells us about Mathematics Collections Development

	Great Lakes Science Bootcamp 2019
May 2019	Mathematics ≠ Science: A study in citation rates over time  Bibliometrics and Research Impact Community Conference 2019
Nov 2018	The long tail of mathematical citations  Annual MathsJam Gathering 2018
Aug 2018	Playing with Mathematical Topic Modeling GeoDeepDive Workshop
June 2018	PodcastRE Not Podcatcher: Archiving Podcasts for Research Code4Lib Midwest 2018
Jan 2018	Word Problems from the Mid-1800s to Now: A Textbook Survey  Joint Mathematics Meetings 2018
Jan 2017	Outside the Equation — Exploring Alternative Forms of Mathematical Communication  Joint Mathematics Meetings 2017 (Panel Convener)
Jan 2017	What We Talk About When We Talk About Mathematics  Joint Mathematics Meetings 2017 (Panel Convener)
Aug 2010	Auditory Mathematics: Podcasting as Mathematical Outreach  Math Fest 2010
Jan 2010	Mathematics and the Internet: The Impact of New Media on a Discipline  Joint Mathematics Meetings 2010
May 2009	Zero-Sum Magic and Null Sets of Planar Graphs 40th Southeastern International Conference on Combinatorics, Graph Theory and Computing
POSTERS	
May 2023	A Field Normalized Exploration of Awoken Papers MLA SLA 2023
Mar 2023	Disciplinary Differences in Citation Aging and its Impact of Librarianship ACRL 2023
Sept 2019	Sleeping Beauties in Mathematical Research International Conference on Scientometrics and Informetrics 2019
June 2019	Measuring Similarity Between Mathematics Research & its References Using Bibliographic Coupling Special Libraries Association Annual Conference 2019

June 2018 Relatively Prime — A Podcast Story in 3 Seasons

ComSciCon 2018

DIGITAL PROJECTS

ARCHIVES AND DATABASES

2019-Current Media History Digital Library

Database (PostgreSQL and SOLR) and Backend (Python and Blacklight) Developer

2017-Curent PodcastRE

Database (PostgreSQL and SOLR) and Full Stack (Python and Symfony) Developer

PODCAST SERIES AND AUDIO ART

2012-Current Relatively Prime Stories from the Mathematical Domain

Host & Producer

2021-Current Library Failure Confessions

Editor & Producer

2022 RadLib Call Numbers Station

Artist Contributor to NYU Bobst Library "Rule No Five," Installation Created and Curated by Amanda Belantara and Ashley Maynor

2021 The New Sound of Libraries

Artist Contributor to The Connection 2021

2015-2017 The Other Half

Executive Producer & Editor

2009-2016 Strongly Connected Components

Host & Producer

2012-2015 Science Sparring Society

Host, Producer, & Writer

2010-2013 Math/Maths

Co-presenter with Peter Rowlett

2009-2011 Combinations and Permutations

Producer & Host

VIDEO SERIES

2011 Math/Maths History Tour of Nottingham

Co-Writer and Co-Presenter (with Peter Rowlett), Director, and Editor

WEBSITES

2022 Mathematics Subfields Citation Network Visualizer

Co-Creator with Jenna Elwing, Thersea Liu, and Xiaotong Xu

2020 LibFails: A Website for Anonymous Library Failures

Co-Creator with Miranda Marraccini

#### LIVE EVENTS

Mar 2021 A conversation with Karen Uhlenbeck

University of Michigan, Ann Arbor Math Club Hosted and Co-Produced with Sarah Koch

Mar 2021 Failure Confessions

The Connection 2021

Produced with Bridget Rowan Wipf and Jason Evans Groth

Oct 2020 24 Hour Maths Magic Show

Produced with Zoe Griffiths, Matthew Scroggs, Ben Sparks, and Katie Steckles

Jan 2020 Relatively Prime - Truthiness

Joint Mathematics Meetings 2020

Nov 2018 Relatively Prime - All The Math Podcasts

Annual MathsJam Gathering 2018

Jan 2017 Relatively Prime - Origins

Joint Mathematics Meetings 2017

Nov 2012 Math/Maths Live at MathsJam 2012

Annual MathsJam Gathering 2012

With Peter Rowlett

Nov 2011 Math/Maths Live from Kingswood School

Kingswood School Bath, England

With Peter Rowlett

Nov 2011 Math/Maths Live at MathsJam 2011

Annual MathsJam Gathering 2011

With Peter Rowlett

Nov 2010 Math/Maths Live from Greenwich

University of Greenwich With Peter Rowlett

Nov 2010 Math/Maths Live from MathsJam 2010

Annual MathsJam Gather 2010 With Peter Rowlett

# INSTRUCTION

# COURSES TAUGHT

2019-Current Lab of Geometry (Michigan)

Embedded Librarian

University of Michigan, Ann Arbor

2009-2011 Finite Mathematics

Instructor

University of Nevada, Las Vegas

2008-2009 Pre-Calculus I

Instructor

University of Nevada, Las Vegas

#### SEMINARS LED

2022-Current Mathematics Communications Seminar

University of Michigan, Ann Arbor

# WORKSHOPS FACILITATED

2022-Current Library Resources for Science Communication

University of Michigan, Ann Arbor

2019-Current Library Resources for Mathematics

University of Michigan, Ann Arbor

2019-Current Library Resources for Statistics

University of Michigan, Ann Arbor

2020-Current Zotero and BibTeX

University of Michigan, Ann Arbor

2020-2023 LaTeX for Engineering Students

University of Michigan, Ann Arbor

2021 Inclusive Interpersonal Skills - Biased Language & Microaggressions

University of Michigan, Ann Arbor

2020-2022 Take Command of Your Dissertation using LaTeX

University of Michigan, Ann Arbor

2020-2022 Barista Basics: Making Better Coffee at Home

University of Michigan, Ann Arbor & MLA Midwest Region

2021-2022 Inclusive Interpersonal Skills - Communications Recovery

University of Michigan, Ann Arbor & Grand Valley State University

2021 SciENcv for Bio-Statisticians

University of Michigan, Ann Arbor

2021 Reclaiming and Normalizing Failure

University of Michigan, Ann Arbor

2021 Software Carpentries - Python

University of Michigan, Ann Arbor

2021 Introduction LaTeX for Bio-Statisticians

University of Michigan, Ann Arbor

2020-2021 Open Access and Mathematics

University of Michigan, Ann Arbor

2018 Audio Editing and Microphone Technique

University of Wisconsin, Madison

2018 Library Resources for ESL 117

University of Wisconsin, Madison

# SERVICE

### UNIVERSITY OF MICHIGAN, ANN ARBOR

2021-Current Member - Text and Data Mining Advisory Group

2019-Current Member - Digital Scholarship Advisory Group

Subcommittees: Text and Data Mining, Programming and Curriculum, Tools & Infrastructure

2023-Current Member - Library Data Steering Team

2019-Current Member - Mathematics Department Learning Community for Inclusive Teaching

Summer 2019 Book Discussion Facilitator: Inventing the Mathematician

2022 Member - Library Analytics Task-force

Subcommittees: Data Project Design

2019-2022 Co-Chair/Member - Library Diversity Council

Co-Chair for 2021-2022 term

Subcommittees: Policing in the Library, Discussion Group, Programming & Curriculum, Elections, Operating Agreement,

Inclusive Interpersonal Communication

2022 Project Client - University of Michigan School of Information

Argus Math Journal Gift (Winter 2022 SI 699: Special Projects in Librarianship and Archival Practice)

2021-2022 Project Mentor - Lab of Geometry (Michigan)

 $Mentor\ for\ Temporal\ Dynamics\ of\ the\ Network\ of\ Mathematics\ Sub-disciplines\ (Winter\ 2022)$ 

Project Website

Winter 2021 Co-Mentor with Tim Ryan for Quantifying Gerrymandering in Michigan (Winter 2021)
Winner of 2021 Pamela J. MacKintosh Undergraduate Team Library Research Award

2019-2022 Member - Instructor College Steering Committee

2021 Project Client - University of Michigan School of Information

Podcast Archive Submissions for PodcastRE.org (Winter 2021 SI 699: Digital Curation)

2019-2020 Member - Pamela J. MacKintosh Undergraduate Research Award

PROFESSIONAL

2023-Current Community Chair

Science Librarians Collaborative

2023-Current Board Member

International Mathematics Knowledge Trust

2023-Current Member - AMS Library Committee

American Mathematical Society

2023-Current Member - AMS Library Advisory Group

American Mathematical Society Publications

2023-Current Librarian Consultant

PreTeXt and Runestone Open Source Education Ecosystem

2021-Current Member - Committee on Permissions

International Mathematics Union

2023-Current Co-Editor Content Team

League of Awesome Librarians

2023-Current Executive Leadership Team

Forward Libraries

2022-Current Editor - Mathematics bibliography

Resources for College Libraries

2021-2023 Founding Co-Chair

Science Librarians Collaborative

2020-2022 Co-Convener - Mathematics Roundtable

Special Libraries Association Physics, Astronomy, and Mathematics Community (SLA PAM)

2019-2022 Member - Writing Team

League of Awesome Librarians

2020-2021 Member - PAM Transition Taskforce

SLA PAM

2019-2021 Member - Hot Topics Committee

Association of College & Research Libraries Science and Technology Section (ACRL STS)

2019-2020 Member - Future of PAM Taskforce

SLA PAM

2019 Reviewer - Mathematics bibliography

Resources for College Libraries

2018 Member - Writing Team

Hack Library School

# HONORS AND AWARDS

2023 LEADING Fellowship

LIS Education And Data Science Integrated Network Group

2023 PAM Division Award

Special Libraries Association: Physics Astronomy Mathematics Community

James M. Matarazzo Rising Star Award

Special Libraries Association

2022 Public Engagement Faculty Fellowship

University of Michigan, Ann Arbor

2021 STEM Advocacy Institute Fellowship

Relatively Prime: Next Generation Storytellers in the Mathematical Domain (Cohort 6)

2020 Louise Leckner Travel Stipend

Physics-Astronomy-Mathematics Community SLA

2019 CADRE Fellowships

Systematic over-time study of the similarities and differences in research across mathematics and the sciences Comparative analysis of legacy and emerging journals in mathematical biology With Marisa Conte, Scott Martin, and Santiago Schnell

2019 SLA All-Star Poster Session

 $Measuring\ Similarity\ Between\ Mathematics\ Research\ \&\ its\ References\ Using\ Bibliographic\ Coupling$ 

Best Use of DH For Fun - DHAwards

PodcastRE

2015 PRX STEM Story Project Grant - Three Letters Met on Broom Bridge

Public Radio Exchange

Best Science Multimedia on the Web - The Science Studio 2012 collection 2013

Chinook - Relatively Prime: Stories from the Mathematical Domain

Edublog Awards Best Education Podcast Shortlist 2010

Math/Maths With Peter Rowlett

Sheepshead Review Rising Phoenix Award 2008

Today on Book of the Day: Your Story on Shuffle