

SAM HANSEN

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EXPERIENCE

2024-Present Director of Communication & Engagement
INSTITUTE FOR MATHEMATICAL AND STATISTICAL INNOVATION

2009-Present Director & Podcast Producer
ACMESCIENCE.COM

2019-Present Database Developer
UNIVERSITY OF WISCONSIN, MADISON

2019-2024 Mathematics & Statistics Librarian
UNIVERSITY OF MICHIGAN, ANN ARBOR

2023 Visiting Scholar
INSTITUTE FOR 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
- 2010 Zero-sum magic and null sets of planar graphs
 Journal of Combinatorial Mathematics and Combinatorial Computing
 Authors: Ebrahim Salehi, Sam Hansen

CHAPTERS

- Upcoming*
 2025 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

REPORTS

- 2024 Final Report of the Committee on Permissions
International Mathematical Union
Authors: Thomas Brennan, Henry Cohn, Sam Hansen, Evelyne Miot, Valeria Simoncini, Stephen Watt

EDITORIALS

- 2024 Introduction to the Special Issue on Social Justice
Issues in Science and Technology Librarianship
Authors: Ginny Boehme, Jeffra D. Bussmann, Sam Hansen, Nastasha E. Johnson, and Sarah Tribelhorn

PRESENTATIONS

INVITED

- Feb 2025* Representation Theory: Making Space for All in the Story of Mathematics
Ohio State University Spectra Chapter Annual Talk
- Sep 2024* The Future of Mathematical Libraries & Research Data Infrastructure
Perspectives on Electronic Information Communication in the Mathematical Sciences
- Sep 2023* Building Mathematical Belonging and Identity Through Storytelling
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
- Jan 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* Stories as a Tool for Belonging in Mathematics
2022 Allegheny Mountain MAA Section Meeting
- Apr 2022* A Lab of Geometry and its Embedded Librarian
2022 Joint Mathematics Meeting
With Tim Ryan
- Mar 2022* Saving New Sounds Roundtable
Association for Recorded Sound Webinars
With Jeremy Morris, Eric Hoyt, Jennifer Wang, and Susan Noh
- Aug 2021* Accessing Mathematics: Blind Mathematicians, Deaf Mathematicians, and Libraries
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 2019 (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**
- Nov 2024* The Hidden Narratives of Mathematics
MathsJam 2024
- Sep 2024* Introducing four new Mathematics Communication Training Lesson Plan
Matrix x Imaginary 2024
- 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 \neq 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

- 2024-Current* Wendy Clarke: The Love Tapes
Database (PostgreSQL and Hasura) and Backend (Python) Developer
- 2019-Current* Media History Digital Library
Database (PostgreSQL and SOLR) and Backend (Python and Blacklight) Developer
- 2017-Current* PodcastRE
Database (PostgreSQL and SOLR) and Full Stack (Python and Symfony) Developer

PODCAST SERIES AND AUDIO ART

- 2024-Current* Carry the Two
Producer & Co-Host
- 2012-Current* Relatively Prime Stories from the Mathematical Domain

Host & Producer

- 2021-2024* 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* MathStatBites
Editor in Chief
- 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

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| <i>Mar 2021</i> | Failure Confessions The Connection 2021 Produced with Bridget Rowan Wipf and Jason Evans Groth |
| <i>Oct 2020</i> | 24 Hour Maths Magic Show Produced with Zoe Griffiths, Matthew Scroggs, Ben Sparks, and Katie Steckles |
| <i>Jan 2020</i> | Relatively Prime - Truthiness Joint Mathematics Meetings 2020 |
| <i>Nov 2018</i> | Relatively Prime - All The Math Podcasts Annual MathsJam Gathering 2018 |
| <i>Jan 2017</i> | Relatively Prime - Origins Joint Mathematics Meetings 2017 |
| <i>Nov 2012</i> | Math/Maths Live at MathsJam 2012 Annual MathsJam Gathering 2012 With Peter Rowlett |
| <i>Nov 2011</i> | Math/Maths Live from Kingswood School Kingswood School Bath, England With Peter Rowlett |
| <i>Nov 2011</i> | Math/Maths Live at MathsJam 2011 Annual MathsJam Gathering 2011 With Peter Rowlett |
| <i>Nov 2010</i> | Math/Maths Live from Greenwich University of Greenwich With Peter Rowlett |
| <i>Nov 2010</i> | Math/Maths Live from MathsJam 2010 Annual MathsJam Gather 2010 With Peter Rowlett |

INSTRUCTION

COURSES TAUGHT

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| <i>2024-Current</i> | Mathematical Communications Four part intensive: The Why & Who, The What, The How, and The Where Institute for Mathematical and Statistical Innovations |
| <i>2019-2024</i> | Lab of Geometry (Michigan) Embedded Librarian University of Michigan, Ann Arbor |
| <i>2009-2011</i> | Finite Mathematics |

Instructor
University of Nevada, Las Vegas

2008-2009 Pre-Calculus I

Instructor
University of Nevada, Las Vegas

SEMINARS LED

2022-2023 Mathematics Communications Seminar

University of Michigan, Ann Arbor

WORKSHOPS FACILITATED

Upcoming Elevator Pitches for Research

Davidson College Summer Research Program

2024 Belonging and Identity: The Intersection of Mathematics and Storytelling

Matrix x Imaginary

2024 Mathematics Poster Design

Institute for Mathematical and Statistical Innovation

2022-2024 Library Resources for Science Communication

University of Michigan, Ann Arbor

2019-2024 Library Resources for Mathematics

University of Michigan, Ann Arbor

2019-2024 Library Resources for Statistics

University of Michigan, Ann Arbor

2020-2024 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

PROFESSIONAL

- 2023-Current* **Board Member**
International Mathematics Knowledge Trust
- 2023-Current* **Member - AMS Library Committee**
American Mathematical Society
- 2024* **Editor**
Special Issue of Issues in Science and Technology Librarianship on Science Librarianship and Social Justice
- 2023-2024* **Community Chair**
Science Librarians Collaborative
- 2023-2024* **Member - AMS Library Advisory Group**
American Mathematical Society Publications
- 2023-2024* **Librarian Consultant**
PreTeXt and Runestone Open Source Education Ecosystem
- 2021-2024* **Member - Committee on Permissions**
International Mathematics Union

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| 2023-2024 | Co-Editor Content Team League of Awesome Librarians |
| 2023-2024 | Executive Leadership Team Forward Libraries |
| 2022-2024 | 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 |

UNIVERSITY OF MICHIGAN, ANN ARBOR

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| 2021-2024 | Member - Text and Data Mining Advisory Group |
| 2019-2024 | Member - Digital Scholarship Advisory Group Subcommittees: Text and Data Mining, Programming and Curriculum, Tools & Infrastructure |
| 2023-2024 | Member - Library Data Steering Team |
| 2019-2024 | Member - Mathematics Department Learning Community for Inclusive Teaching Summer 2019 Book Discussion Facilitator: <i>Inventing the Mathematician</i> |
| 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 Pamela J. MacKintosh Undergraduate Research Award

HONORS, AWARDS, AND FELLOWSHIPS

- 2023 2023 LEADING Fellowship
LIS Education And Data Science Integrated Network Group
- 2023 2023 PAM Division Award
Special Libraries Association: Physics Astronomy Mathematics Community
- 2022 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
- 2019 Best Use of DH For Fun - DHAwards

PodcastRE

- 2015* PRX STEM Story Project Grant - Three Letters Met on Broom Bridge
Public Radio Exchange
- 2013* Best Science Multimedia on the Web - The Science Studio 2012 collection
Chinook - Relatively Prime: Stories from the Mathematical Domain
- 2010* Edublog Awards Best Education Podcast Shortlist
Math/Maths
With Peter Rowlett
- 2008* Sheepshead Review Rising Phoenix Award
Today on Book of the Day: Your Story on Shuffle