

Scientist and product manager with 9+ years of experience in multimethodological research on consumer engagement with media from message to brain to behavior. Expert in experimental design and advanced statistical analysis to transform complex data into actionable insights for product development and strategy.

Skills Summary

- Data science & programming (*Python, R, Jupyter, Github*)
- Product management
- SaaS product design and development (*AI, NLP*)
- Quantitative & qualitative analysis (*e.g., content analysis, time-series analysis, GLM, multi-level models*)
- Science communication (*neuroscience, AI, statistics*)
- Experimental design & implementation (*Psychopy, JSPsych, Qualtrics, Prolific*)
- University & graduate level instruction
- Cross-disciplinary team leadership & logistics
- Media design & production (*Adobe Premiere, Photoshop, Illustrator, Procreate*)

Experience

Research Scientist, *StoryFit*

2022-Present

- Launched SaaS product leveraging audience psychology, natural language processing, and generative and discriminative AI to deliver predictive audience insights and evaluate story potential from script text pre-production
- Managed research processes, from data collection to statistical analysis, for ~500 machine learning models to deliver automated, actionable insights relating to genre, story, character, and audience for application to scripts across phases of media production
- Crafted and conducted communication procedures (product/client fit interviews, technical assistance, customer satisfaction feedback, relationship management) for client-centered product development
- Designed product interface and documentation for educating clients on how to communicate about and apply data insights
- Created a research program to develop automatic assessment of authentic media representations of race, ethnicity, gender, and sexuality to empower inclusive media production processes

Postdoctoral Fellow, Psychological and Brain Sciences, *Dartmouth College*

2020-2022

- Conceptualized & executed fMRI, eye-tracking, & continuous response measurement experiments to characterize changes in audience attention, cognition, & emotion when interacting with entertainment narratives a second time
- Established reproducible analytic pipelines for efficiently extracting & disseminating data insights
- Scripted, performed, & animated three 15-minute murder mystery stories for online survey & behavioral data collection
- Demonstrated how narrative structure helps/hinders audience engagement with story content using mixed-effects modeling
- Discovered chronological time signature underlying cognitive processing of temporally scrambled narratives ([Cerebral Cortex](#))
- Communicated across disciplines & experience levels utilizing my background in media production & theory to advise neuroscientists how best to use media stimuli to understand brain function ([Social Cognitive and Affective Neuroscience](#))

Research Fellow & Instructor, Communication, *Michigan State University*

2014-2020

- Uncovered the ability of personal narratives to synchronize brain function across audiences in fMRI & survey experiment ($n = 30+$) with novel correlation-based methods on large 4D dataset ([Journal of Communication](#))
- Characterized how audience brain engagement varies over time using dynamic time-series analyses with fMRI dataset of 600+ participants ([Journal of Media Psychology](#))
- Synthesized media & psychological theory to explain how audiences engage with morally ambiguous (antihero) characters using bespoke comic stimuli & regression ([Journal of Communication](#))
- Trained & managed team of 15+ interdisciplinary undergraduate & graduate students for data collection
- Authored book chapters providing the groundwork for research at the intersection of media psychology & neuroscience that innovates & strengthens approaches to audience engagement ([Neurocinematics](#) & [Mediated messages and synchronized brains](#))
- Awarded [highest honor for graduate teaching](#) for 6+ years of instruction (class sizes from 5 to 240+ students)
 - Courses included Audience Responses to Entertainment Media, Mass Communication, Strategic Communication, Organizational Communication, Research Methods & Statistics, Communication Campaigns, Public Speaking

Education

PhD & MA, Communication, *Michigan State University*

2014-2020

BA, Mass Communication & Psychology, *Miami University*

2010-2014