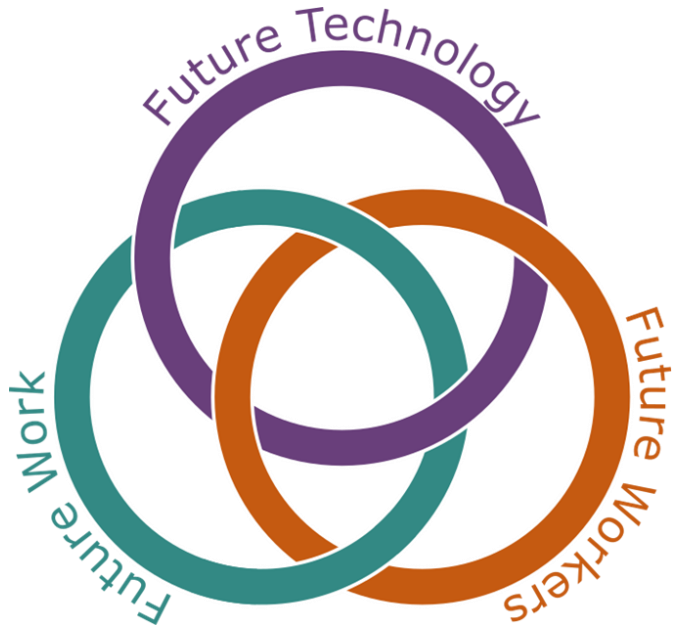


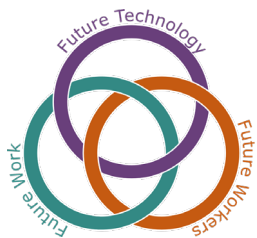


National Science Foundation



Panel 2

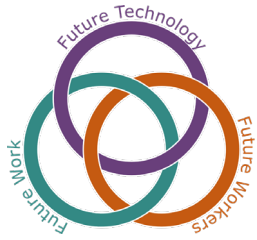
Knowledge and Creative Work



FW-HTF-P 2128416 - Understanding Gig Work and its Effects on Wellbeing over the Life Course in the United States: A Machine Learning Approach

PI: Joelle Abramowitz, University of Michigan, jabramow@umich.edu

- This project aims to contribute to a better understanding of the nature of gig work and how it affects wellbeing
- The gig economy is of particular interest as new technologies increasingly facilitate such work more efficiently than ever before and these work arrangements are particularly hard to measure
- The project will use machine learning to leverage internal narrative responses on industry and occupation as well as employer names for main and secondary employment in the 1997-2021 Panel Study of Income Dynamics (PSID) to identify gig work generally and electronic-platform-mediated gig work in particular
- The approach will produce a longitudinal dataset extending back over 25 years
- The effort will inform the evaluation of new gig work questions included in the 2021 PSID and aid in the development of new survey questions in ongoing data collection, on the PSID and beyond
- Future work will aim to apply the approach to additional datasets and use the data to examine how the nature of gig work has changed with the introduction of electronic platforms and how those changes have affected individuals' wellbeing



FW-HTF-P: Exploring creative design at the human-technology frontier through the emerging “artist-technologist” occupation

(award # 2026439)

PIs: * **Raffaella Borasi** (rborasi@warner.Rochester.edu); Mark Bocko; Zhiyao Duan; Rachel Roberts, Joseph Testani – University of Rochester, Rochester NY

Goal: Exploring the potential impact of AI and AR/VR on the emerging occupation of Artist-Technologist (individuals working at the intersection of art and technology) – to better understand and empower the creative process at the human-technology frontier.

Website for future Artist-technologists (in progress): <https://arttech.mason.digital/>



Future Work

RQ: How are AI and AR/VR most likely to affect future Artist-Technologists' job opportunities and work conditions?

- New job opportunities in media content production
- Potential for empowering free-lancers to be more self-sufficient, and for reducing barriers to entry for under-represented populations

→ *Need for systematic job landscape analyses + research about needed skills*

Future Technology

RQ: What new AI and AR/VR applications may be most impactful for future Artist-Technologists?

- Potential for radically new art creation processes and products
- Biggest limitation is the (in)ability of artists to make use of existing tools

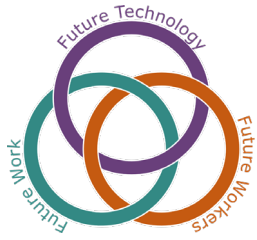
→ *Need for new user-friendly interfaces + processes to create them that include artists' input*

Future Workers

RQ: How can we best prepare Artist-Technologists to be successful in their future jobs/roles?

- Need for more tech knowledge and skills AND conducive mindsets
- Need to be able to work and communicate effectively with technologists in teams

→ *Need for new education interventions – both at college, and earlier focusing on under-represented populations*



21–28906, 21–29020, 21–29047

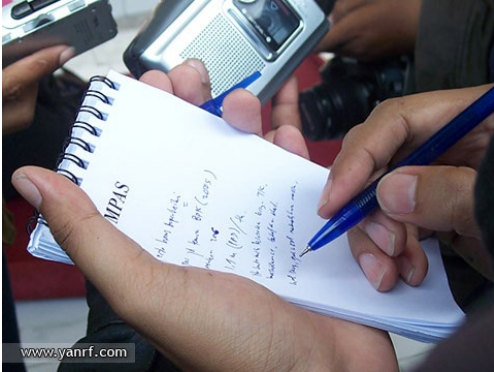
The Future of News Work: Human-Technology Collaboration for Journalistic Research and Narrative Discovery

PIs: Kevin Crowston* and Keren Henderson, Syracuse University

Lydia Chilton and Mark Hansen, Columbia University

Jeffrey Nickerson, Stevens Institute of Technology

Flickr: /yanrf/1408711192



Flickr: /sis/5908569



Flickr: /kirbrik28/3272831972



'Soooo frustrating:' Infighting, bad predictions hindered Missouri response to Delta

What the Panama Papers Reveal About the Art Market

How going remote led to dramatic drops in public school students

Year 1

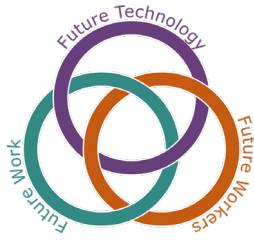
- Field study of current technology use in newsrooms
- Development of prototypes for information extraction

Year 2

- Experiments with systems (full-time and freelance journalists)
- Development of systems for narrative discovery

Year 3

- Field experiments
- Extend systems to handle audio data
- Explore division of labour between journalists and systems

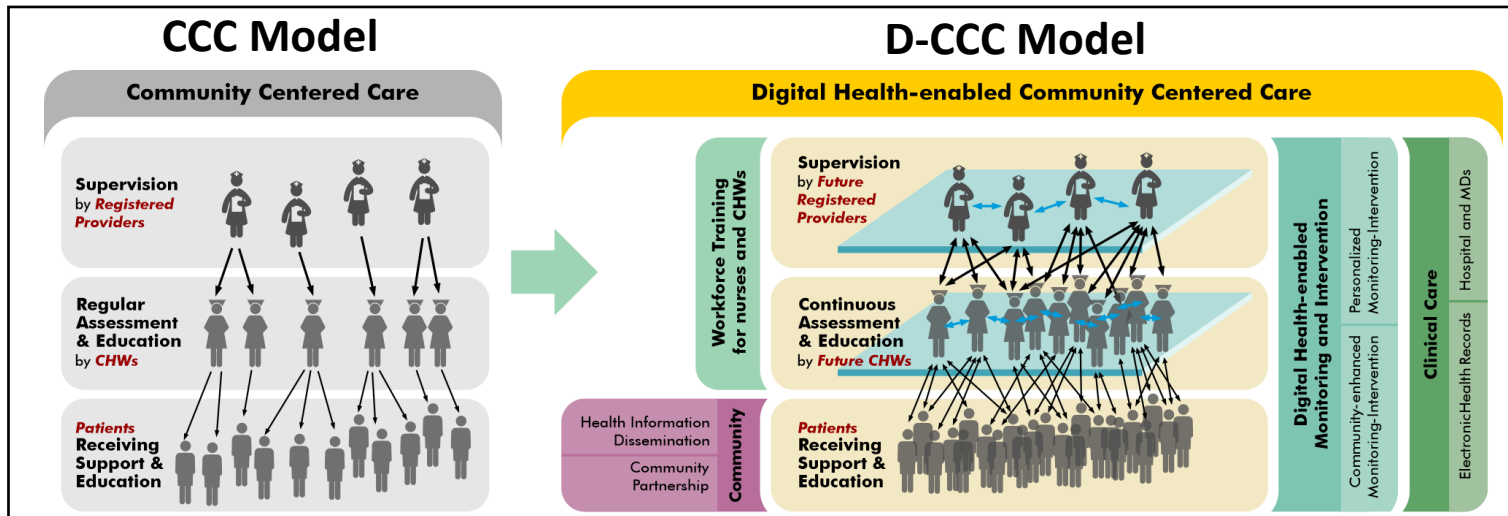


FW-HTF-P: D-CCC: Digital Health for Future of Community-Centered Care (#2026614)

PI(s): Amir M. Rahmani (a.rahmani@uci.edu), Adeline Nyamathi, and Nikil Dutt

University of California, Irvine

Goal: digital health enabled community-centered care (D-CCC) model to transform the manual, restricted, and unstructured state of the current **community healthcare** landscape into a scalable, digital, and automated space.



Built a Community Advisory Board (CAB)
Held several CAB meetings with

- Community Organizations
- Insurance Companies
- Industrial Corporations
- National Association of CHWs
- CHW Training Institutes
- Tech Transfer and Innovation Offices

Conducted focus groups with

- Patients
 - Family caregivers
 - Community Health Workers (CHWs)
 - Registered Providers
- In English and Spanish

- Built Partnership with Meals on Wheels Orange County (MoW OC)
- Conducting a Pilot Study with MoW
 - Patient-family caregiver dyads

