Poster presentations

Information-Theoretic Causal Bounds under Unmeasured Confounding

Authors: Junhyung Ahn, Yonghan Jung

Abstract: We develop a data-driven information-theoretic framework for the partial identification of causal effects under unmeasured confounding. Existing approaches often rely on restrictive assumptions, such as bounded or discrete outcomes, require external inputs (e.g., instrumental variables, proxies, or user-specified sensitivity parameters), necessitate full structural causal model specifications, or focus solely on population-level averages while neglecting covariate-conditional treatment effects. We overcome all four limitations simultaneously by establishing novel information-theoretic, data-driven divergence bounds. Our key theoretical contribution establishes that the f-divergence between the observational and interventional distributions is upper bounded by a function of the propensity score alone. This result enables partial identification of conditional causal effects directly from observational data, without requiring external sensitivity parameters, auxiliary variables, full structural specifications, or outcome boundedness assumptions. For practical implementation, we develop a semiparametric estimator satisfying Neyman-orthogonality, which ensures √n-consistent inference even when nuisance functions are estimated via flexible machine learning methods. Simulation studies and real-world data applications demonstrate that our framework provides tight and valid causal bounds across a wide range of data-generating processes.

Confronting the Hierarchive: Information Suppression and Barriers to Access for Oppressed Information Seekers

Authors: Maya H. Bergamasco and Evan M. Allgood

Abstract: This poster provides a working definition of the “hierarchive,” which we characterize in an attempt to name the barriers faced by oppressed individuals in accessing critical information about themselves via institutional and personal archives. We argue that hierarchival stewards restrict information access from people who need it most because accessing the information within the hierarchive disrupts the oppressive power the hierarchive holds. We present two case sites where the hierarchive and information precarity may collide.

More Than A Checkbox: APALA’s Evaluation Rubric for Asian American and Pacific Islander Youth Literature

Authors: Amy Kyung-Eun Breslin, Sarah Park Dahlen, Kristen Kwisnek, and Becky Leathersich

Abstract: The APALA Evaluation Rubric for Asian American and Pacific Islander Youth Literature (APALA Rubric) was created by an Asian Pacific American Librarians Association (APALA) Family Literacy Focus subcommittee for the purpose of providing a resource to support library workers in evaluating youth literature. The APALA Rubric is framed by Asian Critical Theory, especially the tenets of Asianization, counterstorytelling, and intersectionality. The Rubric can be applied to evaluating youth literature in collections around the world. The Rubric is guided by the following: What impact does this book have on a child or teen reader's understanding of themselves and the world in which they live? The poster will be organized by categories (such as stereotypes, humanity, power, agency) and include application examples. We will also share the impact the Rubric has had by people who work in classrooms, libraries, and the publishing industry about how they use the Rubric and how it has impacted their work. Given the rapid increase in Asian American children's books being published in the US, as well as the increase in imported Asian books, it is even more important for people to understand the contours of Asian diaspora literature for youth.

FreeOrbit4D: Training-Free Arbitrary Camera Redirection for Monocular Videos via Foreground-Complete 4D Reconstruction

Authors: Wei Cao, Hao Zhang, Fengrui Tian, Yulun Wu, Yingying Li, Shenlong Wang, Ning Yu, Yaoyao Liu

Abstract: The "bullet-time" shot — a camera sweeping around a moment nearly frozen in time — normally requires a rig of synchronized cameras surrounding the subject, which is why the effect belongs to film studios and stadium broadcasts rather than to everyday video. We ask whether one ordinary video, shot on a single hand-held camera, is enough to replay the same scene from a completely different viewpoint. The problem is that a single video sees only a narrow slice of a moving 3D world. The far side of a person or animal is simply never observed. Recent generative video models can invent plausible pixels for these unseen regions, but under large viewpoint changes — turning 120 or 180 degrees away from the original camera — they lose track of the underlying geometry, producing distorted limbs, drifting identities, and flickering.FreeOrbit4D addresses this by first recovering geometry and only then generating pixels. We reconstruct the static background and the visible parts of the moving subject in a shared scene space, separately complete the subject's unseen geometry in an object-centered space using a multi-view diffusion model, and stitch the two together through dense 3D-to-3D correspondences. The resulting foreground-complete 4D proxy is rendered along the desired camera path and used to guide a video diffusion model. The pipeline requires no task-specific training and is assembled entirely from existing pretrained components. Across real and synthetic videos under extreme camera trajectories, our method outperforms five recent baselines on standard quality metrics and in a 20-participant user study. The recovered 4D representation also supports editing: a change made to one frame propagates consistently to every new viewpoint. We will present the SIGGRAPH poster along with video results.

Information Experience as Embodied Practice: Tacit Knowledge in GenAI-Mediated E-Textile Making

Authors: Alice Shinhye Cha, Christine Marcelino, Kyungwon Koh

Abstract: This study examines how tacit knowledge develops across cognition-body-material in a GenAI-assisted hands-on making environment. By tracing how makers develop tacit knowledge, the study examines information experience in sociomaterial environments. Information seeking, processing, and use unfold in sequence, and learning accumulates at each stage. GenAI folds them into a single exchange, and the feedback loop of cognition-body-material that hands-on learning depends on is interrupted. Embodied making restores that loop through material resistance, uncertainty, and knowledge built slowly through the body rather than retrieved on demand. While information science has examined how GenAI reshapes information behavior, its influence on information experience — embodied, relational, and felt — remains underexamined. We designed and facilitated a pilot workshop on e-textile making with community members in Champaign-Urbana, Illinois in April 2026. E-textiles offered a contrast to GenAI's on-demand knowledge: circuits must be sewn, tested, and repaired by hand, rendering the cognition-body-material loop observable. Nine participants worked with AI tools of their choice and human facilitators. AI use was optional and unprompted, to create a naturalistic setting. Data collection included think-aloud protocols, observation, pre/post surveys, and interviews to capture cognition, behavior, and emotion in process. Data were analyzed through iterative team-based open coding and codebook development. The study identified three themes — exploration, making, and embodied intelligence — recurring across participants. Exploration showed that participants engaged with AI, materials, and peers when navigating design decisions and expanding design. During making, AI was used to transform abstract ideas into physical fabrication; however, humans had control over the design decisions. Lastly, embodied intelligence surfaced in e-textile work, in the form of tacit knowledge, embodied problem solving, and embodied understanding. This study provides empirical understanding of GenAI mediation in the process of information being embodied, constructed, and felt. It further offers a basis for connecting GenAI-mediated information behavior to embodied maker practice.

When Evidence Competes: Comparing Scientific Reasoning in Humans and LLMs

Authors: Wen-Ning Chen, Michelle Bak, Jessie Chin

Abstract: Existing research on scientific claim evaluation has often examined misinformation detection accuracy and individual cognitive characteristics, while comparatively less attention has been given to how people prioritize and integrate competing evidence into final judgments.

Similarly, research on how LLMs evaluate competing evidence and how these processes compare with human reasoning remains limited. To explore these questions, we conducted two complementary experiments with both human participants and two LLM-based chatbots. Study 1 examined human evidence evaluation and its associations with cognitive characteristics, while Study 2 applied a similar experiment to ChatGPT and Gemini to explore potential similarities and differences in human and LLM evidence evaluation.Across the two studies, the findings demonstrate that successful reasoning depends not merely on recognizing high-quality evidence or avoiding misinformation, but on effectively prioritizing and integrating competing evidence throughout the reasoning process. Additionally, humans and LLMs differed in how evidence influenced subsequent reasoning: human participants demonstrated the capacity to revise their judgments following evidence evaluation, whereas current LLMs more commonly used evidence to justify rather than update an initial conclusion.The findings show that although humans and LLMs acquire knowledge through fundamentally different processes, humans through formal education, real-world experience, and social interaction, and LLMs through large-scale pretraining, both can improve their scientific reasoning through training that explicitly strengthens evidence evaluation. This shifts the focus from answer accuracy alone to the processes by which competing evidence is integrated and ultimately translated into judgments, providing a shared direction for improving both science education and future AI systems.

Ethical Considerations in Large Language Models Research: Insights from Authors' Self-Reported Ethics Statements

Authors: Chieh-Li "Julian" Chin, Jana Diesner

Abstract: As Large Language Models (LLMs) are increasingly adopted across diverse areas of academic research, ethical considerations surrounding their use have received growing attention. To better understand ethical considerations around LLMs, investigating the insights of computational linguistics (CL) researchers can be particularly informative. Based on this motivation, we proposed the following research questions: 1) RQ1: What major themes emerge from researchers' self-reported reflections on ethical concerns, implications, and impacts in LLM–related studies within the CL field? 2) RQ2: How do the ethical concerns reported in LLM-related studies compare with those found in non-LLM-related studies in the computational linguistics field? 3) RQ3: How have these ethical themes in LLM-related studies evolved over time?

To explore CL researchers' ethical considerations, we collected papers from major conferences of the Association for Computational Linguistics (ACL) from 2020 to 2025. We applied BERTopic for text embedding, clustering similar statements, and extracting representative keywords to identify topics. Topic labels and themes were generated through a combination of LLM-assisted interpretation and human review of keywords and representative documents. Preliminary findings suggest that ethical issues in LLM research have evolved over

time and are not the same as other CL areas. Findings of the study provide a starting point to identify potential themes to build a robust taxonomy for LLM ethical considerations and develop a codebook for human annotation. The findings also highlight potential gaps in current regulations and ethics guidelines around LLMs and AI, supporting responsible and ethical research practices.

Partnerships in times of Peril: Research with Librarians and Emergency Responders on the Front Lines

Authors: Sharon Comstock, Lian Ruan, Jessie Chin, Anne Craig, Karen Brown, Kelda Habling

Abstract: In times of emergencies and crisis, libraries of all types serve as key players in community response, recovery, and resilience (Laurien et al., 2004). While much is known of the types of supports libraries provide in the face of emergencies such as natural disasters, fires, flooding, and public health and safety, to name a few (Tu-Keefner, et al. 2024); less refined is our understanding of the nature of library and emergency responder partnerships, which may have implications for community resiliency (Mardis, 2025; Balsari and Kiang, 2021). This poster shares discoveries and analysis of a two-year study to identify fundamental characteristics of "partnership" and suggests potential strategies toward building a sustainable response framework. Through a National Leadership Grant from the Institute for Museum and Libraries Services, "Libraries as Partners for Emergency Preparedness in Times of Crisis" (Ruan, L. et al., 2023), the project team (Fire Services Institute Library, University of Illinois, Urbana-Champaign; School of Information Sciences [iSchool], University of Illinois, Urbana-Champaign; and Consortium of Academic and Research Libraries in Illinois; with a National Advisory Council) conducted a survey (N=562) of library personnel from public, academic, school, and special libraries with a focus on types of crisis; planning and preparedness; and partnerships with emergency responders in 2023-2024 (Ruan et al., 2024). After initial analysis, the Project Team hosted two facilitated Community Engagement Roundtables with panelists from information research, library practice, and emergency services (Feb.-Mar. 2025). In this presentation and discussion, we share characteristics of working partnerships across the cycle of emergency preparedness (acute, recovery, resilience); and suggest strategies to address articulated "pain points" and barriers to building and maintaining partnerships both in times of crisis and not. We discuss next steps and potential application of approaches to evaluating the strength and adaptability of our community partnerships in times of seemingly endemic risk, ambiguity, and economic instability.

Locating Communication Breakdowns Along the Human Information Interaction Sequence: A Preliminary Study of Flight 965

Author: Puranjani Das

Abstract: Communication is often treated as transmission: a message is sent, received, and decoded. In safety-critical work, however, meaning is not fixed. The recipient builds its interpretation from prior knowledge and context, so identical words can lead to different actions. This preliminary study applies a human information interaction stage-based coding schema to American Airlines Flight 965, which struck Cerro El Diluvio in the Andes, to test whether communication failure can be located within the sequence from encoding to action and subsequent recovery.

The framework treats communication as a sequence of stages: encoding, transmission, perception (attention, then phonological reception), comprehension, interpretation (extracting information through the recipient's mental model and situational awareness, then integrating it into that model), action and recovery. A failure at any stage propagates downstream, so a breakdown may originate early and surface later. The unit of analysis is the exchange unit: the utterance, the receiver's response, and relevant cockpit talk.

Five exchanges spanning six minutes and 33 seconds are coded. In the first, the captain's readback added "direct" to a clearance to Cali VOR, reflecting a US domestic schema, and the controller confirmed it without catching the change. In the second, the flight management system deleted intermediate fixes, including Tulua VOR, without alerting the crew, and neither pilot verified the route. In the third, an identifier misselection (ROMEO for ROZO) turned the aircraft toward Bogotá. In the fourth, the crew's "where are we?" query exposed a situational-awareness deficit unresolved by later exchanges. In the fifth, the speedbrakes were not retracted during an escape manoeuvre, an uptake failure traceable to a gap in procedural knowledge.

The preliminary results suggest the causal failures lie upstream, in the early exchanges. Detection and origin can therefore occur at different stages. Because one case was coded by a single analyst, these findings are exploratory and require comparison with additional cases.

Not All Equivalences Are Equivalent: Types of Equivalence in Information Science

Authors: Puranjani Das, Allen Renear
Abstract: Communication is at the heart of information science. Whether we are assigning metadata, documenting ontologies, forming queries, or providing an answer to a patron's question, we are communicating something to someone, present or absent, now or later. Even when not actively communicating, information professionals are supporting the systems, schemas, and standards that make communication possible.

Communication may seem a simple matter of coding/decoding. It is not. To illustrate with a classic example: "Some cookies were eaten" said by someone known as knowledgeable about the cookie situation typically leads to assuming that some cookies were not eaten, even though that is not logically implied. Similarly, "if the record has a DOI, it will be indexed" may be understood as indicating that records without a DOI will not be indexed, even though that is not a logical implication. And if a knowledgeable curator annotates a large collection with just one

occurrence of “dc:language:English”, we assume that more than one of its many items is in English, although dc:language semantics requires just one. Such nonlogical “implicatures” are “presumptive” and blur the line between semantics and pragmatics.

What is at issue is when two statements have the same informational meaning. We show that even the fine-grained notion of expressing the same proposition is, surprisingly, quite different from narrow informational equivalence. Informational equivalence requires that all reasonable expectations of cooperating language users are met. It is a matter of pragmatics, not semantics.

This result has substantial consequences for how we understand the quality of information and informing and shifts the focus away from semantic encoding and logical implications and towards understanding the shared conversational norms that guide our use of language and that vary with the circumstances and background expectations of the people involved.

Mapping Intellectual Property on Campus with Contextual Integrity

Author: David Eby

Abstract: Uploading lecture slides or submitting an assignment is a routine part of university life, but it also places faculty and student work within systems governed by several sets of rules. Intellectual property law, university policies, platform terms, and agreements universities make with technology providers may each address different aspects of how that work can be used. As accessibility services are adopted to support accommodations and platforms add AI features, questions arise about how materials are processed and if creators are notified when third-party services receive their work. This early-stage project proposes visual resources and accompanying guidance that relate these rules to the paths materials take through university systems. Public documents from the University of Illinois Urbana-Champaign and the University of Arizona will inform example maps. A map could follow a professor’s slides from a course platform such as Canvas through an accessibility workflow, identifying the people, organizations, information, and conditions of use involved. Mapping student submissions could similarly clarify what happens to work submitted through required platforms. Drawing on Nissenbaum’s (2010) contextual integrity framework, the project examines these flows in relation to educational purposes and expectations. The proposed poster will present preliminary maps identifying where available documents leave ownership, permission, notice, or the handling of materials unclear. Feedback will help refine the maps and guidance so faculty, students, and other campus stakeholders can better understand how universities and technology providers handle the work they create. Reference:Nissenbaum, H. (2010). Privacy in context: Technology, policy, and the integrity of social life. Stanford University Press.

Memoricide: An Archaeology of the Concept in Information Science

Author: Livia Ferreira

Abstract: Events in which documents, monuments, and other elements that make up the cultural dynamics of a community are lost, destroyed, damaged, or even attempts to reproduce a similar event, can be understood as Memoricide, a term that conveys the ideas of the "murder" or "extermination" of cultural memory and its expressions. In view of the above, the main objective of this paper is to investigate the term Memoricide, its origins, its meanings and the theoretical bases that structure it as a concept, in order to better delineate it for future use and conceive of its relevance in memory studies, especially in Information Science. The methodological procedures adopted consist of a predominantly qualitative approach to data analysis, of a basic nature based on an exploratory treatment of the subject, given that the research seeks to broaden our knowledge of the phenomenon analyzed by exploring reality and real life examples. To this end, we incorporated bibliographic and documentary methods into the data collection procedures. Thus, an archaeological investigation was conducted into the concept of memoricide, contextually exploring the processes through which it was consolidated, analyzing its theoretical frameworks, and examining it through the lens of memory studies within the field of Information Science. As a result, it was identified that the concept emerged in the context of the Balkan conflicts around the 1990s; key elements that constitute its theoretical foundation were mapped, such as memory, heritage, destruction/forgetting, and intentionality; a new categorization for the concept was proposed, distinguishing between extreme and everyday memoricide; and a strong connection between memory studies and biblioclasm was observed in Latin America Information Science studies.

Beyond Word Length, Frequency, and Predictability: Affective Properties Predict Fixation Duration in Naturalistic Reading

Authors: Mohit Gupta; Kiel Christianson

Abstract: Standard models of reading propose that reading is driven by lexical efficiency and word-level variables (length, frequency, predictability), treating it as a purely computational act while overlooking the physiological "feeling" of words. This study demonstrates the influence of a word’s affective properties (valence, arousal, dominance) on eye-movements during naturalistic reading alongside standard lexical constraints. Using linear mixed-effects modeling on the Affective-Provo Corpus, a triangulated dataset constructed by integrating the Provo Corpus, SUBTLEX-US, and Warriner et al.’s (2013) affective norms, we identify distinct associations between affective properties and eye-movement measures across stages of reading. Early processing (First Fixation Duration and Gaze Duration) is associated with arousal, consistent with an automatic attentional “brake” independent of valence. Intermediate processing (Go-Past Time/Regression Path Duration) exhibits a valence × arousal interaction, suggesting that affective characteristics may influence rereading and information verification. Late processing (Total Dwell Time) exhibits an arousal × dominance interaction, suggesting that perceived agency may moderate the processing costs associated with arousal. Based on these

findings, we propose the Alert-Check-Regulate (ACR) Model to describe the temporal organization of affective influences on reading behavior and the GUPTA Theory (Graded Unfolding and Physiological Theory of Affect) to explain their proposed homeostatic function. Together, these frameworks suggest that reading involves not only lexical information extraction but also affective evaluation and regulation. By integrating behavioral eye-tracking data with lexical and affective language representations, this research contributes to understanding human-information interaction and motivates more affect-aware computational models of textual information processing.

Rhetorical and Argumentative Structure Mining in Privacy Adjudication

Authors: Isaac Haizel, Felix Oke

Abstract: Geofence warrants compel Location-Based Service (LBS) providers to identify devices within a defined area and time window. In June 2026, the United States' Supreme Court in Chatrie v. The United States ruled that acquiring geofence data by law enforcement constituted a search under the Fourth Amendment. Prior to this ruling, lower courts produced a fragmented body of opinions on the question. This study asks how those courts framed privacy expectations and particularity, and how much of their argument standard computational methods can recover. We collected 22 opinions from Court Lister, an open source legal database. This was then segmented in 26 separate opinions (majorities, pluralities, concurrences, and dissents). Following a coding manual, each opinion was hand-coded for its treatment of the threshold search question and for remedy separately from merits. We then applied log-likelihood keyness with dispersion and leave-one-out checks, formula detection, dependency-based stance analysis, and lexicon-based motif counting, after removing inline quotations. The results show that courts systematically avoided the threshold search question. Ten out of fifteen affirming opinions assumed or declined to decide whether a search occurred, and this avoidance was inherited through citations across Texas and Georgia. Remedy was decoupled from merits leading to decoupled warrants being upheld under good faith exception. Lexical contrast between affirming and limiting opinions partly reflected opinion genre, driven largely by one decent. Engagement patterns were further revealed by argumentative motifs such as risk framings, physical-search analogies, and mitigation language. This study contributes a reusable geofence-opinion corpus, a hybrid NLP pipeline demonstrating that rhetorical and argumentative structure systematically tracks doctrinal positions in privacy adjudication, offering a scalable lens on the utility-surveillance balance.

Empathize with Librarians: A VR-based Learning Experience

Authors: Xinhui Hu, Michael Twidale

Abstract: Librarianship has evolved significantly over the past decade to embrace a technology-mediated world and serve increasingly diverse communities. However, patrons commonly persist in a book-centric mental model when thinking about libraries, leading to both underestimation and underutilization of library resources. While it is generally agreed that simulating librarians' work could help bridge this experiential gap, the expertise, complexity, and community-serving nature of their work make it challenging to design a simulation sufficiently in-depth for patrons to gain experience beyond a book-centric perspective.Virtual Reality (VR) has shown promise in simulating complex social experiences and fostering shared perspectives and empathy. Yet this technology remains relatively unexplored in the context of librarianship, which involves complex behind-the-scenes challenges that require careful contextualization. Addressing this gap, we conducted an experiment using a VR scenario to probe whether such an approach can help patrons understand and empathize with librarians. By simulating a patron selected as a "one-day librarian," this scenario allows participants to experience daily work scenarios, including answering various patron inquiries involving complex needs and learning from librarians about their professional scope.Our findings reveal strong evidence that even such a simple professional VR scenario can help people better understand and appreciate the real work of librarians. Participants' reflections indicate that understanding the behind-the-scenes work and the breadth of challenges librarians face served as key factors in shifting their perceptions. After the VR experience, the participants showed an enhanced understanding and empathy level toward librarians, with a clear shift from a book-centric stereotype to a community-facing modern mindset. Moreover, the experience also led the participants to develop an in-group perspective toward librarianship. This indicates that VR can be used to foster empathic understanding among patrons, prospective Library and Information Sciences (LIS) students, and potentially in new LIS student training.

AI Gives Us Velocity. Humans Choose the Direction: Designing for Productive Friction
Author: Yun Huang

Abstract: AI can now produce text, code, and synthesis faster than humans can read it. In research and education, that speed has a cost. When AI does too much of the work, people can skip the parts where judgment actually forms: struggling with hidden assumptions, comparing options, sitting with uncertainty, changing their minds. If AI provides the velocity, how do we design for humans to choose the direction?This talk brings together two perspectives from my research and teaching.First, for three years, my group has studied productive friction in AI-supported scholarly work. Across systems published at CHI and related venues, we examined how deliberately designed moments of pause, choice, disagreement, and boundary-setting can preserve human judgment. These systems do not treat friction as inefficiency to eliminate. Instead, we found temporal, structural, interactional, and boundary friction can support reflection, critical evaluation, intellectual ownership, and control over the scope of AI assistance.Second, I draw on three semesters of teaching "Introduction to Generative AI." The tools changed every semester, so I gradually enriched the course activities around five practices

that last: Choose, Question, Judge, Reflect, and Coordinate. I also changed what I grade. A polished final product says little on its own, and I look at the work behind it: what students chose to delegate, what they questioned, and how they worked with classmates and with AI.Both perspectives lead to the same design problem: which frictions should disappear, and which should be deliberately preserved to protect human agency?I'll close with a live demo of PapersClaw, a tool for scholarly discovery and collaboration deployed at CHI 2026 and the 2026 AI Summit, to show these principles at work in a real system.

Rooted in Cultural Sovereignty in Indigenous Knowledge Practices: An LIS Framework for Honoring Refusal

Authors: Vuyokazi Jamieson; Clara M Chu

Abstract: Informed consent is an ethical and legal principle in research determined at the national level, resulting in differentiated levels of compliance across countries. Therefore, what are the implications for Indigenous communities, where collective consent and relational ethics matter most (Smith, 2012)? This poster explores refusal as a generative Indigenous methodological and ethical stance to develop a library and information science (LIS) framework for honoring refusal as a sovereign act of care and knowledge protection. Through an examination of two cases: Amos Bad Heart Bull's ledger drawings and the isiXhosa initiation ceremony of Ulwaluko, we argue that refusal is a form of cultural governance that determines what knowledge may be shared, by whom, and under what conditions (Simpson, 2007). Drawing on the work of Simpson (2007), Smith (2012), Tuck & Yang (2014), Gasa (2007), Hlabangane (2021), Cifor et al. (2019), and Zong & Matias (2024), this poster interrogates authorship vs. cultural ownership, positionality, the role of land and culture as ceremonial actor, and aspects of cultural sovereignty.We invite the audience to reimagine informed consent not as a checkbox, but as a practice accountable to the relational, spiritual, and ceremonial frameworks that govern Indigenous knowledge, and collective and cultural forms of authority. It calls on researchers, within LIS, to confront the limits of access-driven paradigms and to be able to sit with the discomfort that refusal brings.Refusal is not an obstacle to research, rather, it is an ethical, sovereign response to a long history of extractive inquiry. To honor it is to shift from entitlement to humility, and from extraction to relationship. This is not a call to disengage but to engage differently; to listen, to respect the silences, and to co-create spaces of research that value trust, reciprocity, and consent as defined by the community, not the academy.

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Reference Behind Bars: Teaching Critical Library Skills to People Incarcerated Working in Prison Libraries

Author: Kaden Kirtley

Abstract: Access to information for people experiencing incarceration is a major barrier to both academic and reentry success. Many people providing library services in carceral environments are currently incarcerated themselves and often do not have training on basic library service skills, including the reference interview. The reference interview is an iterative process by nature, but each successive iteration can have a higher cost in carceral environments in which there is limited time allowed in the library and where books requested from outside of the facility can take weeks or months to arrive and be cleared. A review of the literature shows much of the scholarship on reference services to the incarcerated is focused on reference-by-mail correspondence performed by library staff and volunteers from outside the facility, targeted towards civilians working in the prison library, or how outside librarians can provide assistance. This poster describes the process of designing and implementing a reference interview workshop provided to people experiencing incarceration at a state prison. Details are included on the adjustments made to teaching the reference interview for library staff with limited access to training on library and information services. While the focus is centered on the reference interview training specifically, the project identifies a need for additional research on the following topics: (1) library services in carceral facilities, (2) library services provided by library workers experiencing incarceration, and (3) equipping and training incarcerated library workers on the provision of library and information services.

Digital Cartography of Trauma: Computational Analysis of Postmodern Prolepsis and Institutional Violence in Sarah Kane's "Cleansed"

Author: David Toh Kusi

Abstract: This paper introduces digital prolepsis and applies algorithmic embodiment to examine how Sarah Kane's postdramatic aesthetic functions in *Cleansed*. The play is a prophetic critique of contemporary institutional dehumanization where the corporeal is transformed into data points for extraction. Digital prolepsis and algorithmic embodiment emerge through Kane's construction of Tinker as a surveillance capitalist figure, whose ubiquitous presence transforms the dramatic world into one of anticipated data collection, manipulation, impunity, and surveillance melancholy. Through digital humanities methods such as Voyant Tools, SentText, and network mapping, the paper identifies qualitative and quantifiable patterns of linguistic degradation, spatial confinement, and corporeal dissolution that mirror broader societal mechanisms of control. Read against the backdrop of Lyotard's notion of postmodern incredulity toward metanarratives, Lehmann's postdramatic theatre theory, Foucault's analysis of disciplinary institutions, and psychoanalytic trauma theory, the analysis demonstrates that Kane's seemingly chaotic narrative structure nonetheless follows discernible algorithmic patterns of trauma reproduction, in which future violence is computationally embedded within present institutional discourse. This analysis situates the play within emerging discussions of algorithmic power and surveillance capitalism (Zuboff, 2019, Draney, 2025).

Meeting standards for entering the workforce

Author: William K. Langston

Abstract: A new industrial revolution (Industry 4.0) is emerging and the future of work will require a fresh focus on employee skills and competencies to support industrial innovation and competition (Li, 2024). Internships can be beneficial for honing those skills and competencies in-demand (Akdere et al., 2019; Zehr & Korte, 2020; Karimi & Piña, 2021). Tomorrow's most promising careers, with upward mobility and lucrative compensation, will likely be considered a STEM (Science, Technology, Engineering, and Math) job. Jobs currently categorized as 'STEM jobs' are more likely to be considered as secure positions in the near future (White & Shakibnia, 2019; Li, 2024). In order for entry-level employees to advance in the STEM workforce, college graduates will need to develop competencies that align with rapidly growing needs of STEM employers (Karimi & Piña, 2021). I am proposing a presentation of a thematic analysis of interpersonal competencies and technical skills believed to be essential for securing entry-level employment in today's STEM workforce. The data is derived from the contributions of interns employed at the University of Illinois' Research Park. Their perceptions have been collected as part of ongoing research exploring internships as a mechanism for preparing entry-level candidates for today's STEM workforce. The presentation will feature interns' perceptions

throughout their journeys. This focus will help understand their evolving acknowledgement of what it takes to matriculate on to full-time employment. The interns' perceptions will be compared against industry standards as presented in a recent NACE (National Association of Colleges and Employers) report on career readiness. This will offer much discussion on what efforts are needed to prepare college students for entering today's workforce.

Can Fiction Increase Curiosity about Information Literacy?

Author: Leland Lanquist

Abstract: A curious student is a motivated one, but how can we spark curiosity for information literacy (IL)? The specific curiosity of interest to this question is "state curiosity" (Lowenstein, 1994), which is defined by being fleeting. The benefits of curiosity for education have been extolled across psychology (Markey & Loewenstein, 2014), neuroscience (Kang et al., 2009), and education (Grossnickle, 2016). Of practical interest to educators is how best to incite that initial state curiosity, with one method being the use of fictional narrative (Knobloch et al., 2004; Dickey, 2011; Maceviciute, 2023). While entertainment-focused approaches such as escape rooms (Cho et al., 2023) have been studied as an intervention for IL, narrative fiction has not. The goal of this study is to determine if fictional stories can trigger state curiosity in adults in the United States, and if that curiosity manifests as a desire to learn more about IL or about the story. 100-200 participants will be asked to read a fictional story where the plot involves characters grappling with IL frame, "Authority is Constructed and Contextual" (American College & Research Libraries, 2015). Then, a survey will ask them what questions they have after reading the story, and the responses will be coded inductively. I anticipate that the participants' questions will first focus on story or plot, but then shift toward IL. This study aims to understand the role of state curiosity in driving IL education, and it will explore the viability of narrative fiction as an IL intervention.

Should an Expert Specialize, Synthesize, or Speculate? A "Gentrification Effect" on Interdisciplinary Research Modeled through Bandit-Arm Bid Search and Arbitrage

Author: Theodore Dreyfus Ledford

Abstract: Expertise formation is an emergent process, given how experts imitate discovery patterns and synthesize knowledge across domains. This poster draws from collective intelligence research, hierarchy-of-hypotheses synthesis approaches, and agent-based modeling to explore how scientific communities stabilize, fragment, expire, and regenerate around exploratory reward structures. Knowledge "stock" and incommensurability fluctuate as competing epistemic currencies are reconfigured as sets across domains (programmed as bandit armnetworks). Epistemic payoffs are modeled as density dependent, in which the

effective explanatory utility of a paradigm decreases as excessive consensus forms around it, while conversely the relative value of payoff may increase, so that new ideas become expensive. This either disincentivizes occupying “conventional” ideas, or can encourage a speculative rush. Secondly, agents are rewarded for discovering a structural hypothesis coupling between arms, but there’s a cost to infer and test equivalence categorically. This simulates the danger drawing extensive theories across disciplines. Bandit arms are compared as binomial sequences with pattern sets tested using Jaccardian similarity. Where strong signal matches are found, that defy a lag across a network, then agents accrue compounded rewards through an ensemble of probabilities—with a diversified epistemic currency portfolio. Agents can pursue a two-fold incentive reward scheme: navigating and accruing a distant set of payouts, while facing penalties for broadness, or committing themselves to a single rewarding bandit, which may face low demand, but perhaps will be prone to attracting overcrowding by experts from other fields.

Translingual Picturebook Storytime as a Relational Space: Inviting Children’s Cultural and Linguistic Experiences

Author: Jungmin Lee

Abstract: Library storytime scholarship offers valuable insights into supporting young children’s language and literacy through responsive interactions and attention to cultural and linguistic diversity. This work-in-progress study examines how a school librarian and young children draw on cultural and linguistic experiences in their interactions during translingual picturebook read-alouds.
Using microethnographic discourse analysis (Bloome et al., 2004), the study examines naturally occurring read-aloud events involving two translingual picturebooks and the interactions surrounding them. The analysis focuses on how participants initiate topics, ask questions, and respond to one another, attending to the forms of participation and relationships that take shape through these exchanges.

Preliminary analysis suggests that the librarian’s talk shaped different possibilities for participation. By sharing her own family naming practices and food memories, the librarian invited children to share experiences from their own lives. These exchanges brought the picturebooks into conversation with children’s cultural and linguistic lives and opened possibilities for more reciprocal participation, as both the librarian and children spoke from experiences they knew firsthand. In selected vocabulary-focused exchanges organized around children’s questions and the librarian’s explanations, the librarian’s role as a source of knowledge was more prominent. Ongoing analysis examines how these different ways of sharing knowledge shape relationships and participation during storytime.

The study considers how translingual picturebook storytime can become a relational space where children connect shared reading with the people, languages, and experiences that matter in their lives. For LIS education and school library practice, it foregrounds the importance of welcoming and valuing these connections and recognizing children's cultural and linguistic experiences as embedded in relationships and everyday life.

From Race to Gender: Biases in Facial Recognition - Impact of AI on gender-diverse populations in policing

Author: Allison Li

Abstract: Facial recognition technology (FRT) and Automated Gender Recognition (AGR) are increasingly used in policing, yet both show documented racial and gender bias. This poster explores what research on FRT bias can teach us about AGR in criminal justice contexts. A literature review of peer-reviewed studies from 2018 to 2025 produced a four-factor framework for evaluating identity recognition systems: dataset diversity, algorithmic fairness, regulatory oversight, and community engagement. Applied to the wrongful arrest of Robert Williams, the framework shows how failures across all four factors combine to cause real harm. The failures seen in FRT have implications for AGR as well. Gender is self-identified and fluid, so there is no true "accurate" classification, and a more accurate system can cause more harm by misgendering transgender and non-binary people. I argue that prohibition, not reform, may be the right response to AGR in high-stakes settings like policing and border control. Although this paper does not study Urbana-Champaign, the framework offers questions the community can ask with regards to the Flock cameras in Urbana-Champaign, such as how the system is audited, who is held accountable for errors, and whether affected residents have a real say in the decision.

Beyond Better Writing: How Children Negotiate Writer Identity in AI-Assisted Storytelling

Authors: Wanqing Ma, Yuhua Wen, Wentao Qu, Jinhui Ouyang, Yun Huang, Min Fan

Abstract: Generative AI (GenAI) can support children's storytelling, yet little is known about how it changes what their stories represent about them as writers. We conducted a qualitative study of AI-assisted story writing with 31 children aged 7–14, who produced 91 stories. Drawing on interaction records, successive drafts, think-aloud accounts, and interviews, we analyzed 136 episodes in which children explicitly connected an evaluation or decision about AI assistance to themselves as writers.Children evaluated AI assistance along five self-representation dimensions: experience and standpoint, creative style and expressive form, writing and linguistic competence, thinking and reasoning, and social and institutional legitimacy. They negotiated these expectations by setting boundaries before generation,

repurposing AI-generated material, fitting personal details into generated text, or consciously delegating writing while acknowledging concerns about their own participation. These strategies could preserve some dimensions while reshaping or obscuring others, depending on how children used AI rather than how much AI-generated text they retained.Building on these findings, we introduce the Writer Identity Negotiation Framework, a mid-level analytic framework connecting children's expectations, features of AI assistance, negotiation strategies, and resulting texts. We also offer design implications for children's AI writing tools, informing when, in what form, and to what extent AI should participate to support children's self-representation.

Who is Seen? Reframing Metadata through Emotion and Representation

Authors: Ruby Martinez and Karen Wickett

Primary Health Care Professionals and Services Facing Socio-Environmental Disasters: A Study in a Health Region of Rio Grande do Sul, Brazil

Authors: Bruna Rezende Martins, Caroline Bertelli, Ana Beatriz Panzera, Isabele Silva Santos da Cunha, Ana Carolina Pasa, Ana Carolina Bienert, Luísa Batista da Rosa de Sousa Boscaini, Hawane Lopes Ferreira, Tainá Schütz, Maickel Cavalheiro Greiner, Letiane de Souza Machado, Edna Garcia Linhares, Letícia Lorenzoni Lasta, Suzane Beatriz Frantz Krug, Ian Brooks

Abstract: Introduction: Socio-environmental disasters affect human, animal, and environmental health, impacting communities and health services. Understanding health professionals' experiences in the face of such events may contribute to strengthening the resilience of health services and care practices. Objective: To characterize the sociodemographic profile and impacts of socio-environmental disasters among health professionals and Primary Health Care services. Methods: This quantitative study was conducted in 13 municipalities in the 28th Health Region of Rio Grande do Sul/Brazil, with 16 health professionals who completed a self-administered questionnaire comprising 45 questions. Data were analyzed using descriptive statistics. The study is part of the author's doctoral action plan developed under the Brasillinois Academic Mobility Program and is linked to the research project "One Health and Health Resilience in the Context of Socio-environmental Disasters: A Study in the 28th Health Region of Rio Grande do Sul," funded by the FAPERGS and affiliated with the Graduate Program in Health Promotion and the Health Studies and Research Group (GEPS) at the University of Santa Cruz do Sul/Brazil. Results: Participants included community health workers (31.25%), nurses, nursing technicians, and physicians (18.75% each), with a predominance of women (75%). Regarding length of service, 43.75% had worked at the health units for 1–5 years, while 31.25% had worked there for more than 10 years. Half reported being affected by extreme events. These events affected the mental health of 50% of participants, including sadness, fear, and

insomnia, while 18.75% reported physical impacts. Among health services, 56.25% had been affected within the previous five years, resulting in power and internet outages, mold, and road blockages that disrupted care provided to the community. Conclusions: Socio-environmental disasters affect both health professionals and health services, highlighting the need to strengthen preparedness, response, and adaptation capacities in Primary Health Care.

Modeling Cross-Modal Incongruity in Behavioral Interviews for Suicide Risk Assessment

Authors: Bakhtiyor Meraliyev; Halil Kilicoglu

Abstract: Multimodal behavioral analysis offers a promising framework for suicide-risk assessment by integrating linguistic, acoustic, and visual information from clinical interviews. Our prior modality-specific experiments have demonstrated that individual behavioral channels contain predictive information: transcript-derived linguistic and behavioral representations achieved ROC–AUC values above 0.9 under participant-level evaluation, while facial representations derived from deep visual embeddings also showed substantial discriminative performance. These findings motivate a shift from evaluating modalities independently toward examining how their signals relate to one another.

Learning the Efficient Portfolio: Machine Learning and Explainable AI for Cryptocurrency Asset Allocation

Author: Matthew D. Murphy

Abstract: Cryptocurrency markets provide a challenging environment for portfolio construction because of their high volatility, changing correlations, and rapidly evolving investment universe. This research investigates whether machine learning can effectively learn the asset-allocation decisions generated by classical mean-variance optimization (MVO).MVO uses expected asset returns, variances, and covariances (the degree to which asset returns move together) to identify portfolios offering efficient combinations of expected return and risk. Using historical cryptocurrency data, rolling estimates of these quantities are used to generate optimized portfolio weights representing the proportion of capital allocated to each asset. These optimization results subsequently provide training targets for machine-learning models, including Random Forests, that attempt to learn the relationship between observed market characteristics and MVO allocations. The study evaluates not simply whether machine learning can reproduce individual portfolio weights, but the extent to which its predicted allocations preserve the statistical and economic properties of the underlying optimized portfolios. Statistical fidelity is assessed using out-of-sample measures such as R^2, mean absolute error, and root mean squared error. Economic fidelity is evaluated by comparing predicted and optimized portfolios using risk, return, Sharpe ratio (risk-adjusted return), diversification,

drawdown, and cumulative out-of-sample performance. Model errors are further examined across different market conditions and cryptocurrency investment universes to identify circumstances under which learning succeeds or deteriorates. Finally, SHAP (SHapley Additive exPlanations) is used to investigate which inputs drive the model's allocation predictions and whether these relationships are economically interpretable. Inspired by studies such as Gu, Kelly and Xiu (2020), Babaei et al. (2022) and related research applying machine learning to cryptocurrency portfolio construction, this project positions explainable AI as a means of both approximating and interrogating a well-established financial optimization process.

Returning to a Digital Society: Digital Inequality as a Compounding Barrier to Reentry
Author: Adebola Obayemi

Abstract: Reentry after incarceration involves navigating interconnected challenges related to employment, housing, healthcare, education, social services, and community reintegration. Existing structural barriers, including criminal-record stigma, discrimination, and disrupted employment trajectories, can already make accessing these resources and opportunities difficult (Pager, 2003; Apel & Sweeten, 2010; Pyle, 2026). Digitalization adds another layer to these challenges because many of the resources returning citizens need are now accessed through digital systems. Applying for jobs, accessing healthcare and social services, pursuing education, managing finances, and communicating all require digital access and skills (Ogbonnaya-Ogburu et al., 2019; Rantanen et al., 2022; Hwang et al., 2024; Robinson, 2024; Sanders, 2025).However, opportunities to engage with technologies can be limited during incarceration. Although correctional institutions use digital technologies, they primarily serve institutional purposes such as monitoring, surveillance, security, and control, while incarcerated people's meaningful access to contemporary technologies, particularly the internet, remains restricted (Jewkes, 2008; Reisdorf & Jewkes, 2016; Reisdorf & Rikard, 2018). Zivanai and Mahlangu (2022) describe the resulting technological disconnection as "digital incapacitation." This creates a disconnect between the technological environment during incarceration and the digital world people encounter after release, where they must navigate technologies and systems they may have had limited opportunities to access, learn, and use. (Reisdorf & DeCook, 2022; Reisdorf et al., 2022; Sanders, 2025).This review synthesizes literature on digital inequality across incarceration and reentry through three interconnected layers of the digital divide: access, skills, and opportunities/outcomes. Drawing on the Digital Rehabilitation Model (Reisdorf & Rikard, 2018), it examines how digital exclusion intersects with multiple domains of reentry. Rather than framing digital inequality as an individual deficit, the review conceptualizes it as a compounding dimension of reentry disadvantage shaped by existing structural barriers, unequal technological trajectories, and digitized systems that assume digital competence.

My Information, My Way: Co-designing Multimodal Generative AI for Older Adults Self Care

Authors: Precious Olalere, Jessie Chin

Abstract: As the global population ages, a growing number of older adults are seeking health information to support increasingly complex self-care activities. Advances in multimodal generative artificial intelligence (GenAI), particularly large language models (LLMs), create new opportunities to tailor health information not only to users' information needs but also to their preferred ways of receiving and engaging with information. This flexibility may be especially important for older adults, who vary considerably in health literacy, sensory abilities, cognitive abilities, technological experience, and communication preferences. However, the ability of generative AI to present health information across multiple modalities does not necessarily mean that providing more modalities will better support older adults' self-care. Moreover, current multimodal systems do not adequately account for how the wide range of cognitive abilities among older adults can shape how older adults comprehend, remember, and apply health information in self-care contexts. To address this gap, we conducted participatory co-design sessions with 31 older adults to investigate preferences for the presentation of Multimodal LLM-generated health information for self-care. Participants engaged with health information and collaboratively redesigned its presentation using text, audio, visual, video, or combinations of these modalities. The co-design sessions were designed to elicit needs and preferences related to cognitive effort, accessibility, information simplification, personalization, and control over information presentation. Data collection has been completed, and qualitative analysis is currently underway to examine how older adults' modality preferences and cognitive abilities shape their expectations for Multimodal LLM-generated health information. Findings from this study are expected to provide insights into how older adults' cognitive abilities and modality preferences can inform the design of multimodal LLM-supported health information systems that better support their self-care needs.

The Same But Different: Reading Asian American-ness in Through a Transracial Transnational Adoptee Perspective in the *To All the Boys I've Loved Before* Netflix Film Trilogy

Author: Emma X. Paulson

Abstract: The *To All the Boys* franchise premiered on Netflix in 2018 and includes three feature films. Starring Vietnamese American and transracial transnational adoptee (TRNA) Lana Condor, *To All the Boys* follows Korean American teenage girl Lara Jean Covey. To All the Boys offers an opportunity to examine how ghostly figures, race, culture, and nation construct the Asian diaspora both on and off screen. Drawing on critical Asian American and critical adoption studies lenses, I analyze *To All the Boys* to better understand what makes someone Asian, both as a character and as an actor. Using Asian TRNA as a critical analytic reveals the interplay between multiple formations of Asian-ness and surfaces underexplored understandings of what it means to be Asian in the United States. I use this reading of *To All the Boys* to create space for Asian TRNAs in Asian American communities by arguing that an adoption perspective provides

an important and necessary bridge to understand the interconnections of family, culture, and death in the United States formations of Asian-ness and Asian American-ness.

Family Fantasies: AsianCrit as an Analysis of Prospective Adoptive Parent Curriculum

Authors: Emma X. Paulson, Kyle L. Chong

Abstract: Increasingly, Asian American (AsAm) transnational adoptee (TNA) scholars interject scholarly nuance to research about when, and how adoptees can share their own stories (Author; McKee, 2019). With legal and familial constraints, scholars like Gerloff (2025) show how research with AsAmTNAs must incorporate "examine the multifaceted ways adoptees assert their own narratives… and [define] themselves" (p. 56). Yet, less attention has been paid to how prospective parents of AsAmTNA are prepared to adopt especially in context of the legal, sociopolitical, and sociocultural tangles that prevent adoptees from having de jure ownership over the instruments that facilitated their adoption. In this paper, we outline initial findings and pathways of inquiry of an ongoing qualitative study of preparatory materials given to prospective parents of AsAmTNAs pre-adoption. In this ongoing study, we interdisciplinarily draw from Asian American studies, education, critical adoption studies, and information sciences because this multifaceted approach affords us ways to study what we call "transnational adoption curricula (TAC)" as a context of everyday life information seeking (ELIS) (Savolainen, 2017), a lived curricular context in which teaching and learning happen (Aoki, 2005), and as a site of Asianization across transnational contexts (Iftikar & Museus, 2018). This ongoing study, conceptually grounded in Asian Critical Race Theory's (AsianCrit) Asianization and transnational contexts tenets, foregrounds how TAC indirectly shape AsAmTNAs' racialization(s) within U.S. contexts. We enter this study as AsAm TNAs ourselves, which place us closely to the data and as those impacted by documents similar to those we study. Methodologically, we combine several qualitative critical discourse analysis (CDA) approaches to center race in this study for TAC documents (Author; Hodge, 2024; James-Gallaway, 2024). Together, this study contributes analyses of TAC to how adoption agencies frame how prospective adoptive parents shape their AsAmTNA's racialization, and, eventually, how AsAmTNAs speak back to TAC.

Who Becomes Visible? Exploring Older Adults' Experiences in HCI Research

Authors: Joy Phang; Phoebe Mbuvi; Tracy Bowden

Abstract: This poster reflects on an earlier study of older adults' experiences with the Carle patient portal app. Beyond its original findings, it also prompted further discussions. The limited variation in participants' responses, along with the absence of perspectives from less-experienced users, raised a broader concern about older adults' participation in HCI research.

The conditions that make participation possible, including digital access, confidence, experience, time, health, and social support, may systematically privilege older adults who are already better positioned to engage with technology. Their experiences are valuable, but relying mainly on these participants can limit the range of user experiences captured and leave important usability barriers less visible. As a result, older adults facing greater barriers can remain underrepresented in the research, leaving their experiences and perspectives overlooked in the knowledge HCI produces about older adults. Using the previous study as a reflective case, this poster presents the original study and its findings, extends the discussion of the methodological questions that emerged from it, and connects these questions with selected literature on sampling, participation, and diversity among older adults in HCI. It considers which older adults and user experiences become visible through HCI studies, which may remain difficult to capture, and how participant composition may shape research findings. This poster brings attention to ongoing considerations and open questions about studying the diverse experiences, abilities, and circumstances of older adults in future HCI research.

Mental Models of Researchers and Scholars on Writing Conference Papers

Authors: Charan Pushpanathan Prabavathi, Joy Phang, Michael B. Twidale

Abstract: Mental models shape how people act in complex tasks, yet little is known about the mental models researchers hold of conference paper writing. Academic writing guidance has often been product-oriented, emphasizing what a finished paper should look like rather than how researchers produce one. Conference papers make this gap especially relevant in computing, where writing occurs under fixed deadlines and page limits. We present an interview study of 12 researchers across information science, HCI, computer science, and education, reporting their goals, strategies, and challenges. Our findings suggest a recurring project-first mental model associated with a difficulty gradient: effort concentrates on meaning construction, which also appears to shape where AI is admitted or refused. We discuss how disciplinary knowledge structures may influence these practices and offer design implications for writing-support tools. We close by reflecting on our own writing process against these findings and invite readers to do the same.

Artificial Intelligence: A Nomenclature Problem

Authors: Charan Pushpanathan Prabavathi, Michael B. Twidale

Abstract: The field of artificial intelligence is named after a capacity its systems have never been shown to possess. This paper argues that the trouble lies not in the machines but in the word. We show that intelligence never converged on a single meaning in the study of human beings, and that the field borrowed the term from this unsettled history without anchoring it. The

result is a name that fails to refer along four interlocking dimensions: (1) a category mistake, (2) a persistence of the name beyond its grounding conditions, (3) reference without ground, and (4) meaning supplied by the listener rather than the artifact. The defect is in the name. The remedy lies in renaming rather than redefinition.

When a Story Feels Like Mine: How Personalized Narratives and Humor Shape Older Adults' Empathy toward LLM-Generated Peer Health Stories

Authors: Kexin Quan, Precious Olalere, Smit Desai, Jessie Chin

Abstract: Peer stories have been shown to boost self-efficacy in older adults' health behavior change. Despite their effectiveness, peer stories are difficult to deploy in health promotion at scale given the difficulty of matching the diverse health concerns and coping styles of heterogeneous older populations. Large language models (LLMs) have been shown to generate authentic narratives, yet how personalization and narrative affective style, such as humor, jointly shape older adults' responses remains unknown. We developed a theory-driven system that generates first-person peer health narratives varying in personalization and humor through a three-stage LLM pipeline grounded in self-efficacy mechanisms. Thirty-one older adults were invited to participate in a within-subjects lab study. Results showed that personalization increased perceived relatability and relevance of peer stories, especially for older adults with lower humor preference. These findings position individual differences in affective styles as a second dimension in designing personalization for LLM-assisted health communication.

From Momentary Emotion Inference to Sustained Emotion Support: Evaluating a Companion Agent in a Longitudinal Study

Authors: Kexin Quan, Zijian Ding, Jiaye Yong, Qinshi Zhang, Dong Wang, Jessie Chin

Abstract: Sustained emotional support is a long-horizon interaction task closely tied to human well-being. Recent research demonstrates generative agents' capacity for momentary emotional support, yet how these capabilities translate into sustained support over time remains unclear. To examine this challenge, we deployed PAIR, a theory-based emotion-regulation companion, with 19 participants for 14 days. Across 1,093 sessions, we paired emotion estimates with self-reports before and after guidance and analyzed logs and interviews. Estimates corresponded more closely to self-reported valence and dominance than arousal. Guided conversations were followed by higher valence and state-dependent arousal changes. Participants felt understood through contextual exploration and emotional acknowledgment, acting on guidance suited to their needs and constraints. Perceived helpfulness of guided conversation significantly increased over time. Our findings link memory updates and retained corrections to cross-session personalization, informing future emotional

support tools that adapt to evolving needs, learn from prior outcomes, and preserve user control over memory.

Bring back the blue book? A reflection on teaching strategies, engaged pedagogy, and the challenges of GenAI in the classroom

Author: Yvette Iribe Ramirez

Abstract: Introduction: This paper reflects on teaching practices implemented as a pre-doctoral lecturer in undergraduate informatics courses on race, gender, information, and technology. It reintroduces the blue book not as a punitive measure against generative AI (GenAI), but as an intentional analogue practice to foster engagement, creativity, and reflection in the classroom. Approach: Through literature review, applied practice, and framed by feminist, decolonial, and critical information studies, the paper discusses inclusive strategies such as in-class journaling, student-led facilitation, and multimodal final projects that encourage diverse learning styles and redistribute power in classroom dynamics. The reflection emphasises the importance of diversifying reading lists, valuing lived experience, and offering students meaningful choice in demonstrating their learning. These approaches respond to the lingering effects of the COVID-19 pandemic on student attention and participation, while also addressing the challenges and risks posed by the rise and prevalence of GenAI in higher education. There is also an acknowledgement of limitations and need for future work. Conclusion: Ultimately, this paper argues for a pedagogy of engagement that resists both nostalgia and technological determinism, foregrounding human experience, care, and community as essential elements of learning in a rapidly changing educational environment.

Applying a Human Rights-Based Framework to Participatory Information Science Research

Author: Yvette Iribe Ramirez

Abstract: This work presents an in-depth analysis of the Liderazgo, Comunicación y Cambio Climático project in Vaupés, Colombia, through a dual interpretive framework designed to evaluate participatory research in practice. Building on a previously established theoretical foundation and methodological design, this work applies two complementary lenses: (1) participatory interpretation grounded in the principles of Participatory Action Research (PAR), and (2) a rights-based evaluative framework derived from the Human Rights-Based Approach (HRBA) articulated by Charters and Stavenhagen. Rather than treating participatory methods as data collection tools alone, this analysis examines how they functioned as mechanisms for governance, cultural affirmation, and self-determination. The goal is not only to understand what the project produced, but how its design, facilitation, and relationships aligned with

international principles of Indigenous rights, particularly those expressed in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Systemization of Knowledge (SoK): Human-Centered AI Safety for Youth

Authors: Pratyasha Saha, Yaman Yu, Yang Wang

Abstract: While the HCI community recognizes the importance of AI safety for youth and conducts empirical research that is relevant for this topic, we lack a systematic and comprehensive view of the current literature on human-centered AI safety for youth, for instance, what risks have been identified and addressed. To help fill this gap, we conducted a systematic review of over 100 empirical HCI studies involving children and youth interacting with or exposed to AI systems, spanning schools, homes, care settings, and public services. Organizing risks using the Youth-Centered Generative AI Risks taxonomy and countermeasures using the MIT AI Risk Mitigation Taxonomy, we map out which risks have been identified, whether each risk is addressed by countermeasure(s), and whether each countermeasure for that risk is implemented and even evaluated. This risk–countermeasure mapping reveals that most reported risks have only proposed or ideated countermeasures, few have been implemented, and fewer still evaluated; and existing evaluations often measure technical performance rather than protection from harm. We identify where coverage is absent, where safeguards remain untested, and propose concrete directions for HCI research to strengthen youth AI safety.

Weather events, social vulnerability and emergency department visits in Illinois

Author: Duaa Shalan

Abstract: Extreme heat and cold can harm health, but their effects may not be the same in every community. This project used emergency department (ED) visit data from IDPH's ESSENCE system to answer three questions for Illinois. First, do heat and cold events increase ED visits? Second, do counties with higher social vulnerability have more ED visits? Third, is heat more harmful in more vulnerable counties? We analyzed about 5.7 million ED visits across all 102 Illinois counties during the summers of 2022–2024. A heat event was defined as two or more days in a row among a county's hottest 5% of summer days. Social vulnerability was measured with the CDC Social Vulnerability Index (SVI). Each county was compared with itself during the same week, so differences between counties did not affect the heat results. Heat events increased ED visits by 2.4% in total, and most of the rise came two to three days after the heat began. Cold events more than doubled cold-related illnesses such as hypothermia and raised falls among older adults in the days that followed. The most vulnerable counties had about 11% more ED visits than the least vulnerable ones. However, heat raised ED visits by a similar amount in all counties, regardless of vulnerability. These findings suggest that heat is a

statewide risk, that heat and cold responses should continue for several days after the event, and that the most vulnerable counties need extra support.

“Everyone Has Their Own Treasure Hunt”: Theorizing Low Archival Provenance in Lost Media Wikis

Authors: Li Su, Travis Wagner

Abstract: Every day, media disappears. Television commercials are pulled from circulation, locally broadcast films are quietly shelved, fan-made videos are deleted, and platform shutdowns erase entire digital communities overnight. This project examines volunteer-run lost media wikis, online communities where participants document, search for, and sometimes recover media that has disappeared from public circulation. These communities operate between platform circulation and institutional preservation, often working with uncertain provenance, partial memories, and fragmentary digital traces. Through a comparative case study of the English-language Lost Media Wiki and the Chinese-language Lost Media Wiki, this study examines how participants produce archival knowledge under conditions of absence and uncertainty. The analysis draws on wiki articles, community rules and finding logs, notice boards, and forum discussions. It focuses particularly on two recurring practices: evidentiary practice and speculation. The findings show that evidence in these communities is often collaborative and provisional. Participants establish claims through activities such as contacting original creators, examining file metadata, comparing fragments, and collectively testing competing explanations. When direct evidence is unavailable, speculation—including reconstructed images, remembered scenes, and visual comparisons—can provide temporary directions for further investigation rather than simply filling gaps. Based on these practices, the project develops Low Archival Theory, drawing on Halberstam’s low theory and Ahmed’s queer phenomenology. It argues that failure, uncertainty, speculation, and nonlinear provenance can function as productive conditions for archival knowledge-making. In lost media communities, archival knowledge is assembled, contested, and revised through practices that work with these conditions rather than resolving them.

"Tag, You're It: Improving Our Public Image": A Content Analysis of Visual Information in Cross-Talk, 1988-1996

Authors: Travis Wagner; Emrys Brandt; Milo Ono

Abstract: The past decade has seen considerable growth in the documentation of and access to transgender archival documents. Once seen as an impossible and inaccessible history, this archival work has revealed robust communities of information circulation. Among these communities was Cross-Talk, a newsletter that served the information needs of what might

now be understood as transgender women. Operating from the mid-1980s to the early 2000s, Cross-Talk reveals how members of this community built networks, utilized emerging technologies, and began identifying relevant information from health care needs to media representations. To date, very little has been written about how Cross-Talk operated, and even less has been examined related to the types of information shared across the newsletter's multi-decade run. In response, this poster reports on a preliminary content analysis of the visual information present within Cross-Talk over eight years of the newsletter. Highlighting the types of information shared within the newsletter, thematic elements of this information, and the material qualities of this visual information, this poster identifies and theorizes how visual information functioned within a still-forming transgender community. Through this content analysis, the authors speculate on how advances in digital publication methods afforded this subset of the transgender community new ways to produce transgender iconography, while simultaneously collaborating across an increasingly networked group of shared identities. Further, the poster considers how, through visual information like advertisements and comics, Cross-Talk helped establish early trans femme aesthetics, while repurposing and transing images from media, technology, and everyday life. The poster concludes by discussing the limitations of this newsletter with regard to representations of class and race, while identifying implications and future directions for analyzing still-emerging histories of transgender visual information.

Developing a Sustainable Learning Framework for Adult Engagement with Emerging Technologies

Author: Alina Wang

Abstract: Examining how adult learners learn and engage with emerging technologies, such as generative artificial intelligence (Gen AI), in both formal and informal learning environments has become increasingly significant. Using AI tools is no longer limited to traditional students in formal school settings. Instead, it is a crucial skill for adults navigating contemporary workplaces and daily life. However, existing research on human-AI collaborative learning focuses more on traditional learners (children, youth, and university students) in formal classrooms and neglects adult learners using GenAI tools in informal environments. For instance, professionals engage with AI in the workplace, and retired older adults interact with AI at home or in communities. In the real world, human-AI collaborative learning does not just occur in a single dimension in which one human works with one AI. Human-AI collaboration extends beyond simple human-machine dyads. In reality, human-AI collaborative learning occurs in a multi-party dimension, including Human-Human-AI (H-H-AI), Human-AI-Human (H-AI-H), and AI-Human-Human (AI-H-H) configurations. To address these gaps, this proposed study will use a mixed-methods design, combining quantitative surveys and qualitative interviews to examine the internal barriers (e.g., tech anxiety, cognitive load) and external obstacles (e.g., UX friction, unreliability) that adult learners face in non-deterministic AI

environments. Grounded in adult learning theories, information-seeking and sense-making behaviors, and self-regulated learning mechanics, specifically reflection-in-action and reflection-on-action across different scenarios, this research aims to evaluate AI's role in both formal and informal learning contexts. Ultimately, this study proposes to develop a sustainable, multi-party human-AI collaborative learning framework to support adult learners' technology adoption.

ADHD and Tabletop Roleplaying Games: An Autoethnography

Authors: Olivia Wang, Deana McDonagh, Rachel Adler

Abstract: Tabletop roleplaying games (TTRPGs) are cooperative games where players immerse themselves in an imagined world and make decisions as fictional characters. They span many genres of narratives and are enjoyed by a diversity of players. Two aspects of enjoying TTRPG games include feeling immersed within their worlds and socially engaging with other players. Players' differing access needs can make immersion and socialization more or less challenging. This work autoethnographically explores the author's enjoyments and challenges with ADHD when engaging in TTRPGs. It involves an analysis of recordings and journal entries created during the author's experiences across multiple sessions. The sessions were played in different contexts, including in-person and online as well as one-shots and ongoing campaigns. This work highlights an individual perspective on what could make TTRPGs more accessible and inclusive for players with ADHD.

The Organic Firewall: Cognitive Security in an Age of Disinformation

Author: Emily Wegrzyn

Abstract: Disinformation is the deliberate creation and dissemination of false or misleading information, and it is a critical challenge in today's digital society. Online platforms have revolutionized global communication, but they have also enabled disinformation operators to execute adversarial information operations that disrupt democratic processes, manipulate public opinion, and erode institutional trust. Recent advances in AI have industrialized these efforts, producing convincing fake content at unprecedented scale and speed, intensifying an already urgent problem.Control over information has always been associated with power, but the mechanisms of that control have fundamentally changed. Information control formerly depended on restricting literacy skills and access to information, concentrating authority among the elite. In today's digital era, that model has been inverted. Literacy is near universal and information reaches around the world through open, high-volume ecosystems. Contemporary control involves disinformation operators who distort visibility and flood networks with adversarial narratives, limiting genuine access to reliable information without restricting it outright. This poster situates contemporary disinformation within that broader history of

information control and the disordered information environment it now inhabits. Disinformation, misinformation, and malinformation are closely linked to information warfare and offensive information operations, integrating platform infrastructures, algorithmic amplification, and coordinated actors into strategic campaigns. Safeguards such as platform moderation, editorial review, and institutional literacy programs can get overwhelmed by volume and erode. The last checkpoint in the information chain is the individual's cognitive processing: an "organic firewall", the cognitive security dimension of information ecosystems. Defensive responses like platform security and content detection leave this last line of defense, the human mind, under-supported. By tracing how information control has shifted from restricting literacy and access to flooding the information environment with adversarial content, this poster argues for renewed attention to the cognitive security dimension of information ecosystems as a critical, yet undersupported, site of defense.

A topic modeling analysis of latent themes in AI literacy research (2016-2025)

Authors: Roman M. Zapata; Michael Twidale

Abstract: Artificial Intelligence (AI) literacy encompasses the sets of competencies and knowledge needed to use, evaluate, and engage with AI responsibly across educational, professional, and everyday contexts. Although interest in AI literacy has rapidly accelerated, especially with the rise of Generative AI technologies, existing reviews rely on small qualitative samples and offer limited insights into how themes and trends in this field have evolved. AI literacy research lacks a scalable, data-driven analysis to clarify how the term is conceptualized across disciplines and how research priorities have evolved over time. Using a corpus of 2,160 Scopus-indexed, peer-reviewed articles, this project uses
BERTopic and dynamic topic modeling (DTM) to identify latent topics within AI literacy research and track their temporal trajectories. Results suggest that the primary area of research is GenAI literacy in education, while AI literacy in healthcare and library and information science (LIS) remain comparatively underexplored. Sub-topic modeling within the AI in education cluster reveals sustained emphasis on AI literacy in higher education (HE), a declining focus on K–12 education, and emerging interest in specific AI literacy competencies, adoption and usage patterns, and measurement development. These findings suggest that AI literacy is a broad, rapidly evolving research construct being largely shaped and defined by the emergence of GenAI within formal educational spaces. This project provides a scalable, computational overview of the field and highlights opportunities for future work in LIS, HCI, and education research.

De Novo Design of Soluble Ephrin-B2 Decoy Receptors via a Generative AI-Guided Experimental Approach

Authors: Lin Zhu, Le Xue, Lingyun Xu, Erik Procko, Diwakar Shukla

Abstract: Ephrin-B2 (EFNB2) is a transmembrane protein that acts as a ligand for six Eph receptors in humans and also functions as the cell entry receptor for Nipah virus (NiV), a zoonotic virus with a high pandemic potential. Given the high morbidity and mortality associated with NiV infection in humans, engineering EFNB2 as a soluble decoy receptor to neutralize the virus and prevent infection is a promising therapeutic strategy. However, traditional protein engineering methods, such as directed evolution, are time-consuming, experimentally expensive, and labor-intensive. In contrast, data-driven approaches leveraging generative models have shown strong potential for designing proteins with desirable functionalities. In this study, we present an integrated computational and experimental framework for the rapid de novo design of EFNB2 decoy receptors using a generative artificial intelligence (AI) approach. We trained a data-driven generative model on pairs of protein sequences in which each target sequence exhibited higher experimental fitness than its corresponding input sequence, enabling the model to learn sequence transformations associated with improved functional performance. Guided by this learned optimization trajectory, 100 novel EFNB2 variants were selected for experimental validation. Approximately 83% of the designed variants exhibited higher NiV-G binding than wild-type EFNB2 (WT-EFNB2), and the best-performing decoy receptor retained strong binding under Eph receptor competition, achieving a 5.54-fold improvement over wild type. Several engineered decoy receptors demonstrated enhanced binding specificity and potent neutralization activity against chimeric henipaviruses. To further elucidate the molecular basis of this enhanced specificity, we performed molecular dynamics (MD) simulations on the top-performing EFNB2 decoy receptors, revealing the structural rearrangements and thermodynamic interactions responsible for their enhanced binding performance. This AI-guided design, experimental validation and MD-based mechanistic analysis pipeline provide a highly efficient and generalizable framework for therapeutic protein engineering and antiviral drug discovery.