Seeing Humanity in Technology: Library Innovations in the Context of Generative Artificial Intelligence (GenAI)

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The impact of generative artificial intelligence (GenAI) is unfolding across many aspects of academia, including library services and librarianship. After the initial stage of emotional and cognitive turmoil—just as with previous technological innovations such as computers and the internet—this special issue is a contribution from a group of "surfers"—librarians and researchers with bravery and open mind. They share their exploration despite uncertainty and confusion. Their studies contribute to the library profession's understanding of the human and humanity in technology, and to the building of healthy relationships and a responsive research ecosystem.

Gao et al., titled "AI in Scholarly Publishing: A Study on LIS Journals' Guidelines and Policies," examine the current state of guidelines and policies regarding the use of GenAI and Large Language Models (LLMs) in 45 Library and Information Science (LIS) journals. They find that while many have begun to implement policies—particularly concerning authorship, AI use in writing and images, and disclosure requirements—there is still a lack of standardization across the field. Notably, the study reveals a significant correlation between a journal's impact factor and the presence of AI statements.

Trembach, titled "We Are in It Together: Community-Based Learning as a Tool for Teaching AI Ethics in Library Professions," draws on empirical data collected from position paper and instructional demo assignments in a graduate-level library science course. The author advocates for integrating AI ethics education into LIS curricula through community-based learning, emphasizing critical thinking, ethical reflection, and practical application to address challenges such as algorithmic bias, privacy, and transparency.

Wu and Liu, titled "What Motivated Them to Assume Leadership Roles: Content Analysis of Interviews with Former CALA's Presidents," explore the motivations of Chinese American librarians in leadership roles and demonstrate the use of GenAI tools (specifically ChatGPT and Claude) for thematic analysis of interview transcripts in this qualitative research, reflecting on the potential and limitations of AI in scholarly work as a research method.

Zhang et al., titled "Proposing A Critical AI Literacy Framework for Academic Librarians: A Case Study of a Database-Anchored GenAI Tool for Chinese Studies," introduces a Critical AI Literacy (CAIL) framework designed to help academic librarians guide researchers in evaluating GenAI outputs, particularly within the humanities. It proposes seven Critical AI Literacy Skills, emphasizing awareness of issues like data transparency, bias, and human labor exploitation in AI development. Crucially, the authors introduce the RACBAC Standard (Relevance, Accuracy, Coverage, Bias, Authority, and Currency) as a practical tool for assessing GenAI content and its

sources. A case study using CNKI SMART, an AI-driven academic database for Chinese Studies, demonstrates the application of this standard, revealing both the strengths and significant limitations of GenAI in academic research.

Qian, titled "Changes and the Challenges of Library Reference Services After the Covid-19 Pandemic," draws on survey data from 21 librarians and in-depth interviews with 12 librarians at New England liberal arts colleges. The author highlights how reference services navigated disruptions during and after the pandemic, strategically integrating AI technologies —including GenAI—to enhance outreach, overcome service barriers, and reconnect effectively with students. The article emphasizes AI not merely as technology adoption but as part of strategic and proactive responses by librarians to new academic landscapes.

Tang, titled "Factors Influencing Book Selection: A Practical Study of Integrating AI Models for Forecasting at a Large Public Library," employs I multiple quantitative models—logistic regression, decision trees, SVM, and multi-layer perceptron (MLP)—to analyze numerical data regarding book selection decisions, and to create a predictive model for English book acquisitions in a major Shanghai public library. The author highlights how librarians incorporated AI-driven predictive models into English book acquisition processes, demonstrating that the MLP model delivered the highest accuracy in forecasting book selections. The author viewed AI as a practical, strategic innovation supporting the evolution of smart libraries through enhancing decision-making, improving collection quality, and optimizing resource allocation in library management.

Together, these studies demonstrate how library and information science professionals are critically and creatively engaging with the promises and challenges of GenAI. Gao et al. highlight the uneven development of journal policies on AI use, calling attention to the need for standardized, transparent guidelines. Trembach offers a pedagogical perspective, showing how community-based learning can foster ethical reflection and critical thinking in LIS education. Wu and Liu model the use of GenAI tools in qualitative research, while reflecting on their methodological limitations. Zhang et al. introduce a practical framework for evaluating GenAI content, empowering librarians to guide researchers with critical AI literacy skills. Qian emphasizes how librarians proactively integrate GenAI to reshape reference services in response to post-pandemic educational needs. Tang illustrates how predictive GenAI models strategically enhance decision-making and resource optimization in library collection management.

Collectively, these contributions point to a growth-oriented, strategic direction within the LIS profession: integrating AI ethics, GenAI literacy, and practical applications of AI as core components of research, education, and practice—grounded in the profession's longstanding commitment to human-centered, ethical innovation.

About the Guest Editor

Yali Feng is the Behavioral Sciences Librarian in the University of Illinois at Urbana-Champaign. she provides services for psychology and social work, delivering services such as research consultation, instruction, and collection development, and facilitating research data services and systematic reviews. She holds an MLIS from the iSchool at the University of Illinois. Her current research interests revolve around generative artificial intelligence and library services.