Plenary Speech

The AI Reality:
Cultivating Opportunities, Embracing Learning, and Facing Challenges

Speaker
Dr Dania Bilal

Abstract

Dr. Bilal will focus on the impact of artificial intelligence (AI) on the information landscape, our lives, and our societies. AI is a reality, will continue to evolve, and is here to stay. Adopting AI in the workplace affords new opportunities for innovating services and operations. However, AI will dramatically affect our work and lives. A recent report shows that over fifty percent of those surveyed feel more concerned than excited about AI (https://aiindex.stanford.edu/report/). Studies have also suggested that integrating AI in education for teaching and learning causes anxiety, frustration, fear, and student concerns about data privacy, safety, bias, and societal implications (Bilal, He, and Liu, 2025).

These concerns permeate libraries, information organizations, and other sectors of society. Besides worry about rendering information professionals "irrelevant," potential exists for adverse consequences, such as loss of equity in sharing and using information, and the risk of compromising information integrity, which can threaten the library and information science profession's core tenets in providing equitable and inclusive access to information (Bilal, Chu, Rieh, and Choi, 2025; Singh, Bilal, Cox, Chidziwisano, and Dinneen., 2023). Informational professionals and leaders can shape the future of AI adoption and practice in their workplace. Historically, libraries and information organizations have adapted to and embraced new technologies that once seemed to challenge their relevancy, such as automation, cloud computing, remote services, and big data. They have accomplished this partly by retooling and innovating existing operations and services to adapt to emerging technologies, providing new services that meet user expectations and serve their communities. The rapid advances in AI have

raised questions about how to maintain the relevance of libraries and equip information professionals with the necessary skills and competencies to navigate this technology (Cox, 2023).

In the age of AI, staying ahead and leading the way is crucial for harnessing AI potential to enhance operations, services, and users' experiences. Dr. Bilal will discuss key areas for adopting AI in the workplace, including but not limited to, redefining what we do, keeping humans in the loop, providing effective AI education and training, supporting continuous learning and retooling; balancing data privacy, safety, risks, ethics, and human values, ensuring inclusivity and accessibility, building awareness of human and algorithmic bias in AI solutions, offering robust human-centered AI literacy programs, including GenAI, and developing AI policies.

AI will bring disruption but can also be transformative. Preparing for change and adaptability is crucial for adopting and evaluating AI in the workplace and navigating this innovative and powerful technology.

References

Bilal, D., He, J., & Liu, J. (2025). AI in Education: Transforming Teaching and Learning. Information and Learning Science journal. Editorial. Forthcoming.

Bilal, D., Chu, C.M., Rieh, S.Y. (2025). Bridging the AI education, knowledge, and skills gap of library and information professionals: Evaluation of the Innovation, Inquiry, Disruption, and Access (IDEA) Institute on Artificial Intelligence (AI). Journal of Education for Library and Information Science. Forthcoming.

Cox, A. (2023). How artificial intelligence might change academic library work: Applying the competencies literature and the theory of the professions. Journal of the Association for Information Science and Technology, 74(3), 367–380. https://doi.org/10.1002/asi.24635

Singh, V., Bilal, D., Cox, A., Chidziwisano, G. H., & Dinneen, J. D. (2023). Global AI initiatives: from theory to practice. Proceedings of the Association for Information Science and Technology, Vol. 60, No. 1, pp. 836-840. https://doi.org/10.1002/pra2.873

Brief CV

Dr. Dania Bilal is the Patricia D. Williams Professor at the School of Information Sciences, University of Tennessee-Knoxville. She is an information scientist, educator, and researcher who has worked and practiced in various libraries and information organizations. Her research focuses on human information behavior, human-AI interactions, and human-centered design of technologies, including Artificial Intelligence (AI) and Generative AI (GenAI). Her recent research has addressed educating and training information professionals in AI, AI in education, and AI4 Youth. She led the Innovation, Disruption, Enquiry, Access (IDEA) Institute on AI project (2020-2023), funded by the Institute for Museum and Library Services in the United States. Currently, she is leading the University Tennessee System's (UTS) Challenge project, Beyond Boundaries: Introducing 4-H Students to Gen-AI Through Immersive Learning Experiences (ILEs) (August 2024-December 2025), which is funded by UTS. She is the guest editor of the Information and Learning Sciences Journal special issue,

AI in Education: Transforming Teaching and Learning (2025). Dr. Bilal has numerous publications and has been in the top 2% of most-cited researchers worldwide since 2022.