



Graduate School of Information Science, University of Hyogo 20th International Research Seminar

BUILDING AI WE CAN TRUST: HUMAN-CENTERED DESIGN FOR HEALTHCARE SYSTEMS

Tue. 23 Dec. 2025 (11:00 ~ 12:00) JST

ONLINE SEMINAR

Artificial intelligence is reshaping digital health by enhancing clinical workflows, enabling early and accurate disease prediction, and supporting complex diagnostic tasks involving imaging, genomics, and physiological data. These advances are expanding the reach of telehealth, improving care personalization, and strengthening healthcare operations. Drawing on work from my lab, this seminar will highlight AI-driven systems for cancer screening, cardiovascular risk forecasting, and ICU resource optimization demonstrating how intelligent tools can support clinicians and improve patient outcomes. Yet translating research innovations into everyday clinical practice remains a challenge. Issues of bias, fairness, explainability, and accountability are increasingly intertwined with the risks introduced by large language models, including hallucinations and unreliable reasoning. Addressing these challenges requires a shift toward responsible and explainable AI systems that are transparent, equitable, privacy-preserving, and grounded in clinical domain expertise. I will share socio-technical strategies from our research, including human-in-the-loop methodologies that integrate the perspectives of clinicians, patients, and ethicists throughout development and deployment. These approaches strengthen trust, enhance interpretability, and promote safe and effective use of AI in both clinical care and health-system operations. Ultimately, trust is the foundation of AI adoption in healthcare. By centering people, ensuring transparency, and advancing robust policies and education, we can build AI systems that reinforce human judgment and deliver health benefits responsibly and equitably.

Register here (free)

<https://shorturl.at/llkj1>

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Guest Speaker



Syed A. C. Bukhari
Associate Professor & Director of
Research,
St. John's University, New York, USA



Dr. Bukhari is a globally recognized expert in biomedical informatics and trustworthy artificial intelligence. His research focuses on developing AI-driven methods to integrate complex healthcare data, enable predictive modeling of clinical outcomes, and advance reproducibility and transparency in biomedical research. He connects cutting-edge AI methodologies including neuro-symbolic and explainable frameworks with real-world healthcare applications, addressing critical challenges in data standardization, clinical decision support, and health information interoperability.

He leads federally funded research on intelligent systems that enhance biomedical knowledge generation, clinical workflow efficiency, and healthcare decision-making. His lab develops transparent predictive models, extracts actionable insights from biomedical datasets, and fosters effective human-AI collaboration in clinical environments. These efforts are shaping the future of health informatics and predictive analytics with a strong emphasis on practical impact, safety, and clinical relevance.

A sought-after keynote speaker and invited panelist, Dr. Bukhari regularly engages international audiences to share his vision for responsible AI in healthcare. He serves on editorial boards of leading journals, edits special issues, and contributes to global grant review panels, influencing research directions in AI, biomedical informatics, and health data science. His work has been recognized internationally for advancing trustworthy AI and improving patient safety, clinical outcomes, and reproducible scientific practices.

He is a tenured Associate Professor and Director of Research at St. John's University in New York, where he also leads the Healthcare Informatics program. Dr. Bukhari earned his Ph.D. in Computer Science from the University of New Brunswick, completed a postdoctoral fellowship at Yale School of Medicine, and contributed to standardized pipelines for FAIR biomedical data submission as part of Stanford University's CEDAR Metadata Center.

For more details:

<https://www.stjohns.edu/academics/faculty/syed-ahmad-chan-bukhari>