

15th Annual
CHITA 2025 Program
Austin, Texas

Friday, April 25, 2025: Doctoral Consortium
Noon – 6:00pm CT (Lunch: Noon – 1pm)
Rowling Hall, RRH 5.382

Saturday, April 26, 2025 (all times are US Central Time)
All events on this day will be held in Robert B. Rowling Hall.

7:00 - 8:00	Breakfast: Special Events Room, Rowling Hall 5 th Floor, RRH 5.210					
8:00 - 8:15	Welcome Remarks: Dean Lillian Mills					
8:15 - 9:15	Industry Panel on “AI for Societal Health”: Shawn Wang (Gainwell Technologies), Emma Cartmell (Create Health Ventures), Chris Moose (Wheel), Indranil Bardhan (Moderator)					
9:15 - 9:30	Coffee Break					
9:30 - 10:30	Session 1A (AI FOR DIAGNOSIS & TREATMENT - I) REGULAR			Session 1B (HEALTH IT & POLICY - I) REGULAR		
	Session Chair: Chancellor Woolsey			Session Chair: Erin Espinosa		
	Enhancing Cost Prediction in Capitation Payment Models: A Deep Learning Framework for Addressing Patient Heterogeneity in Healthcare	Mohammad Morid and Olivia Sheng	RRH 5.402	Mergers and Data: Evidence from Healthcare	Nan Clement, Amalia Miller and Catherine Tucker	RRH 4.416
	Redefining Trust through AI: How an AI Diagnostic System Influence Doctor-Patient Relationships in Oral Healthcare	Xi Zhang, Yutong Pian and Jie Zhang		Service Digitalization and Labor Dynamics: The Impact of Telemedicine on Nurse Workforce	Yixuan Liu	
	Using Avatars for Anonymous Diagnosing	Chancellor Woolsey, Sumi Lee, Nell Maltman and Gondy Leroy		Process Mining for Juvenile Justice	Erin Espinosa, Monica Chiarini Tremblay, Arturo Castellanos, Rachel Porter, Rajiv Kohli, Agnij Mallick and Zach Ling	
10:30 - 10:45	Coffee Break					
10:45 - 12:05	Session 2A (AI FOR DIAGNOSIS & TREATMENT - II) REGULAR			Session 2B (GENERATIVE AI IN HEALTHCARE) REGULAR		

	Session Chair: Prakash Jayakumar			Session Chair: Junjie Luo		
	Nudging for Artificial Intelligence Care Management Services: Evidence from a Randomized Field Experiment	Siliang Tong, Manyang Zhang, Qing Ye, John Dong and Zhijun Yan	RRH 5.402	Revolutionizing Physician Workflows and Well-being with Generative AI: A Field Study on the Adoption and Impacts of DAX Copilot in a Major Health System	Jingjing Li and Sarah Lebovitz	RRH 4.416
	PathoAgent: An AI-Driven Collaborative Agent System for Pathology Image Interpretation and Question Answering	Trang Huynh, Alaa Melek and Tongxin Gao		LLM-augmented Shortage Radar: Early Social platform Signals for Drug Shortage	Yichen Wang, Kangping Zeng, Wenjing Wendy Duan, Rong Liu and Marko Zivkovic	
	Privacy-Aware AI for Mental Health: Advancing Sensor-Based Early Detection	Aijia Yuan, Sagar Samtani and Lucy Yan		Leveraging Large Language Models for Equitable Patient–Clinician Communication	Lily Poursoltan, Wei Chen, Karandeep Singh and Kevin Zhu	
	Shared Decision Making using Digital Twins in Knee Osteoarthritis Care: A Randomized Clinical Trial of an AI-enabled Decision Aid	Prakash Jayakumar, Eugenia Lin, Zoe Trutner, Lauren Uhler, John Andrawis, Karl M Koenig, Paul J Rathouz, Joel Tsevat*, and Kevin J Bozic		Foundation Models for Diabetes Management: Integrating Diverse Human Behavioral and Sensor Data	Junjie Luo, Ritu Agarwal and Gordon Gao	
12:05 – 12:35	Lunch: Special Events Room, Rowling Hall 5th Floor, RRH 5.210					
12:35 – 12:45	Remarks by Ethan Burris, Senior Associate Dean, McCombs School of Business					
12:45 - 13:30	Keynote					
	Speaker: William Chan, CEO, Iodine Software			Special Events Room, Rowling Hall 5th Floor, RRH 5.210		
13:30 - 13:40	Break					
13:40 - 14:50	Session 3A (AI FOR CHRONIC DISEASE MANAGEMENT) SPEED			Session 3B (MENTAL HEALTH & AI) SPEED		
	Session Chair: Yuening Yan			Session Chair: Jiayuan Tian		
	Impact of Remote Patient Monitoring Ecosystems on Health Outcomes for Chronic Heart Disease Patients	William Olivera, Aaron Baird, Lars Mathiassen and Yusen Xia	RRH 5.402	Racing with Generative AI: Impact of Conversational Agents on Mental Health Counselors	Chenxi Guo, Karen Xie, Seokjun Youn, Xunyu Chen and Wei Chen	RRH 4.416
	Personalized Acute-Phase Prediction in Chronic Disease Management: A Counterfactual Estimation with Cross-disease Treatment Dynamics	Ming Cai and Chuan Hoo Tan		Emotionally-Aware Conversational Agents: Design and Application in Psychological Counseling	Tongxin Zhou, Yingfei Wang and Wanning Chen	
	From Onset to Outcomes: Guiding Neurological Disease Care with AI-Powered Precision	Gabriel Owusu, Xuan Wang, Geng Sun and Chenzhang Bao		Leveraging Large Language Models to Transform Mental Health Care: Enhancing Decision Making, AI-Human Collaboration, and Healthcare Equity	Tala Mirzaei and Pouyan Esmaeilzadeh	
	Artificial Intelligence Applications for Older Adult Care: A Systematic Literature Review	Kimia Tuz Zaman, Wordh UI Hasan, Juan Li and Bo Xie		Information Systems in Social Prescribing: Digital Integration for Holistic Mental Health Care	Philipp Reindl-Spanner, Mark Ballagi-Pordány and Helmut Krcmar	

	The Effect of Online Follow-ups on Offline Appointments and Online Consultations: Evidence from Chronic Disease Physicians	Anqi Zhao, Qian Tang and Yang Gao		High Stakes, Low Spirits: Unveiling the Mental Health Impact of Online Sports Gambling	Jiayuan Tian, Guohou Shan, Michael Rivera, Liangfei Qiu and Hasan Md Mahmudul	
	Harmonizing Clinical Intelligence: An Analysis of Rule Conflicts between AI Training and Real-Time Inputs in AI-Powered Decision Systems	Yuening Yan				
14:50 - 15:05	Break					

15:05 - 16:05	Session 4A (HEALTH IT AND POLICY - II) REGULAR			Session 4B (BIAS AND FAIRNESS IN AI) REGULAR		
	Session Chair: Kartik Ganju			Session Chair: Jiayi Liu		Room
	Kicking the Can or Sharing the Load? Interoperability's Role in PDMP Policy Spillover Across Oregon's Borders	Xiru Pan, Niam Yaraghi, Nan Clement and Catherine Tucker	RRH 5.402	From Bias Assessment to Mitigation: Ensuring Fairness in Machine Learning Models for Predicting Treatment Outcomes in Medication for Opioid Use Disorder	Tongnian Wang, Yuanxiong Guo and Kim-Kwang Raymond Choo	RRH 4.416
	Managerial Ability and Risk-based Reimbursement: The Role of Hospital Information Integration	Tianjian Guo, Indranil Bardhan and Wen Wen		Algorithmic Biases in Deep Reinforcement Learning Models: Evidence from Sepsis Data	Anshuman Senapati and Sudip Gupta	
	The Impact of Prior Authorization Algorithms on Personal Bankruptcies	Hyeongseo Park, Kartik Ganju and Gautam Ray		Healthcare Algorithms and Racial Disparities: Realized Value or Lost Opportunity?	Qi Wang, Jiayi Liu, Ruba Aljafari and Anandhi Bharadwaj	
16:05 - 16:20	Break					
16:20 - 17:20	Session 5A (HEALTH POLICY & ECONOMICS) SPEED			Session 5B (BEHAVIORAL HEALTH & DIGITAL INTERVENTIONS) SPEED		
	Session Chair: Huseyin Tanriverdi			Session Chair: Behnaz Bojd		Room
	Evaluating the Impact of Information Sharing on Data Breach Risks in Hospitals	Sung Choi, Min Chen, Yan Chen, Atilla Hertelendy and Sebastian Schuetz	RRH 5.402	Unveiling E-Cigarette Brand Satisfaction: A Hybrid Approach Using Deep Learning and Randomized Field Experiment	Bin Zhang, Yongcheng Zhan and Haijing Hao	RRH 4.416
	The Geography of AI in Healthcare: Spatial Spillover Effects and Health Equity Implications of Hospital AI Adoption	Connor Wu, Xiaojin Sun and Ramesh Sharda		Do Mobile Nudges Work? Public Transportation Use and the Efficacy of Air Pollution-related Digital Nudging	Jaehoon Jeong	
	Healthcare Under New Ownership: Does Private Equity Improve Healthcare Value?	Minghong Yuan, Wen Wen and Indranil Bardhan		From Screens to Smarts: Modeling Effective Gameplay Pathways for Enhancing Health Knowledge Using Markov Models and Inverse Reinforcement Learning	Rahul Ladhania, Shreyas Vajjhala and Rema Padman	
	Determinants Of Hospital Survival or Closure In The United States: Evidence From 2009–2017	Huseyin Tanriverdi and Xiaoxuan Yang		Smartphone Against Smartphone: An IT-Enabled Social Network Activation for Reducing Smartphone Overuse	Shaokang Yang, Idris Adjerid and Jiayi Liu	
	Urban-Rural Divide in Cybersecurity Breaches of U.S Hospitals: The Roles of Religious-Secular Mission and Profit-Nonprofit Motives	Lirong Lu and Huseyin Tanriverdi		Overcoming the Stigma Barrier: Conversational Information-Seeking from AI Chatbots versus Humans	Behnaz Bojd, Aravinda Garimella and Haonan Yin	

17:20 – 17:45	<i>Adjourn & Break</i>
17:45	<i>Buses leave AT&T Hotel and Conference Center for Restaurant</i>
18:30 - 22:00	<i>Conference Reception & Dinner:</i> Oasis Restaurant, Lake Travis
22:00	<i>Buses leave Oasis Restaurant for AT&T Hotel and Conference Center</i>

Regular Sessions: 15 min. presentation followed by 5 mins of Q&A after each paper.

Speed Presentations: 10 min. for each paper, 10 mins of Q&A at the end of session.

Sunday, April 27, 2025
(all times are US Central Time)
All events on this day will be held in Zlotnik Ballrooms, AT&T Conference Center.

7:30 - 8:30	Breakfast: Zlotnik Ballroom Salon 4, AT&T Hotel and Conference Center						
8:30 - 9:30	Roundtable: HIT Cases in Action						
	Session Chair: Bo Xie						
	(Health IT and Analytics (HITA) in Action Track) Real-world smartphone data predicts mood after cerebrovascular symptoms and may constitute digital endpoints			Stephanie Zawada, Jestrii Acosta, Caden Collins, Oana Dumitrascu, Ehab Harahsheh, Clint Hagen, Ali Ganjizadeh, Elham Mahmoudi, Bradley Erickson and Bart Demaerschalk		Zlotnik Ballroom Salon 4	
	A proposed foundational architecture for AI-powered digital health platforms			Abhimanyu Kumbara, Mansur Shomali, Siddharth Banyal, Anand Iyer and Gordon Gao			
	Case Study: Implementing the NURSING-AI Challenge to Transform Real-World Nursing Education, Practice, and Research Through AI Innovation			Bo Xie, Nicole Murry, Katie Sanders and Wonshik Chee			
9:30 – 9:45	Break						
9:45 - 11:05	Session 6A (SOCIAL & BEHAVIORAL IMPACT) REGULAR				Session 6B (PATIENT CARE MANAGEMENT) REGULAR		
	Session Chair: Rahul Ladhania			Session Chair: Raj Sharman			
	When Peers Matter More: The Dominance of Social Influence Over Algorithm Accuracy in Patient Decision Making	Shujing Sun, Lauren Xiaoyuan Lu, Susan Feng Lu and Wei Gu	Zlotnik Ballroom Salon 5	Managing the Heat Wave Aftermath: Temporal Patterns in Emergency Room Revisits Drive Dynamic Resource Planning	Connor Wu, Xiongying Chen, Chenzhang Bao, Xiao Luo, Wenting Jiang and Ramesh Sharda	Zlotnik Ballroom Salon 6	
	The Impact of Public “Word-of-Mouth” on Disaster Response: Prescription Practice during the COVID-19 Pandemic	Sezgin Ayabakan, Lakshminarayana Nittala, Subodha Kumar, Dileep Unnikrishnan and Dileep Raman		Beyond the Pulse: Racial Disparities in Oximetry Readings and the Influence on Early Readmission Rates	Gaurav Jetley and He Zhang		
	From Food Deserts to Fresh Food: The Role of Digital Accessibility in Nutrition Assistance Programs	Zhuoxin Allen Li and Cheng He		Does Premium Version Adoption in mHealth Improve User Engagement and Health-Related Outcomes?	Yikun Jiang, Kosuke Uetake and Nathan Yang		
	Personalizing Treatments via Regularized and Clustered Joint Assignment Forests: Leveraging Megastudies in Behavioural Science	Rahul Ladhania, Jann Spiess, Lyle Ungar and Wenbo Wu		Impact of Patient Navigators on Emergency Department Utilization	Jiajia Qu, Raj Sharman and Indranil Bardhan		
11:05 - 11:20	Break						

11:20 - 12:10	Session 7A (DIGITAL HEALTH & HEALTH IT) SPEED			Session 7B (HEALTH IT & DATA) SPEED			
	Session Chair: Gayoon Kim			Session Chair: Sriram Somanchi			
	Text-to-SQL Pipeline for Boston Children’s Hospital	Gabriel Miller, Siddhi Poojari, Jagrut Sharma, Jaykumar Patel, Sanjai Gnanavel and Akhil Giridhar	Zlotnik Ballroom Salon 5	ProtoMed-LLM: An Automatic Evaluation Framework for Large Language Models in Medical Protocol Formulation	Seungjun Yi, Jaeyoung Lim, and Juyong Yoon	Zlotnik Ballroom Salon 6	
	The impact of team-based ordering workflows on ambulatory EHR use and efficiency	A Jay Holmgren and Nate Apathy		Epidemics of health misinformation and disinformation: An infodemiology research agenda for information systems	M. Mahbub Hossain, Ravi Aron, Norman Johnson and Rajiv Kohli		
	Large Language Model-Powered Anxiety-Focused Chatbot for Adolescents & Caregivers: A Few-Shot Learning Approach	Sahiti Kadiyala, Aijia Yuan and Sagar Samtani		How Far Has the Open Science Discourse in Healthcare Progressed? –Systematic Review on the Open Science in Healthcare Using Meta-analysis Methodology	Sunmyoung Lee and Jaehoon Jeong		
	Keep an Eye on Me: The Role of Activity Tracking Group as a Social Pre-commitment for Healthier Behaviors	Gayoon Kim, Donggyu Min, Yeongin Kim and Chul Ho Lee		Difference-in-Differences Subset Scan	Will Stamey, Sriram Somanchi and Edward McFowland		
12:15 - 13:00	Lunch: Zlotnik Ballroom Salon 4						
13:00 – 13:30	Awards Ceremony						
13:30 - 13:40	Break						
13:40 - 15:00	Session 8A (BUSINESS VALUE OF HEALTH IT) REGULAR			Session 8B (DIGITAL HEALTH) REGULAR			
	Session Chair: Qian Tang			Session Chair: Shujing Sun			
	Operational Inefficiency of Diagnostic Discrepancies: The Weigh-In of Focal and Related Physician Experience	Seokjun Youn and Yingchao Lan	Zlotnik Ballroom Salon 5	Venturing with BioData Objects: Stairways to Scalable Data for Life Science Discoveries	Sirkka L Jarvenpaa, Hannes Rother and Katharina Lauer	Zlotnik Ballroom Salon 6	
	Health IT Diffusion and Physician Labor Supply	Lucy Xiaolu Wang, Jianjing Lin and Jason Huh		A Two-Tier Adoption Process: The Case of Physicians Prescription of Digital Therapeutics	Deinera Jechle, Kirsten Seerig and Heiko Gewald		
	Closing the Organizational Gap in Medical Innovation Using Health Information Systems	Kartik Ganju, Weiguang Wang and Hilal Atasoy		The Cost of Task Switching: Evidence from Organ Transplantation	Jiayi Liu and Yiwen Jin		
	How Do Online Healthcare Platforms Shape Physician-Patient Interactions? Effects of Crowdsourcing Pre-consultation on Service Delivery and Patient Satisfaction	Qian Tang, Anqi Zhao and Han Zhang		Value of Consumer-Facing Information Technologies: Evidence from Healthcare Service Delivery for Kidney Transplant Patients	Mehmet Ayyaci, Yeongin Kim, Srinivasan Raghunathan, Shujing Sun, & Bekir Tanriover		

15:00 - 15:15	Break					
15:15 - 16:00	Session 9A (AI & ML IN HEALTHCARE) SPEED			Session 9B (AI & WELL-BEING) SPEED		
	Session Chair: Mehmet Ayvaci			Session Chair: Nazli Usta		
	Towards a More Accurate and Equitable COPD Mortality Model: A Multimodal Approach	Alaa Melek, Aaron Luong, Lili Zhao, Girish Nair and Edward Castillo	Zlotnik Ballroom Salon 5	Can AI Make Us Happier? A Randomized Experiment on AI's Emotional Impact	Fangchen Song, Ashish Agarwal and Yifan Yu	Zlotnik Ballroom Salon 6
	Predicting Post-Stroke Spasticity: A Novel Deep Learning Approach with Explainability	Yonggeon Lee, Eunjin Yun, Jiawei Xu, Tinglin Huang, Anthony Elkommos Youssef, Rex Ying, Hamidreza Saber and Ying Ding		How AI Reciprocity drives Adoption Intentions in AI-based Health Services among the Elderly	Johann Kranz and Alexander Zieglmeier	
	Enhancing AI Generalizability in Breast Cancer Screening: An Adaptive Ensemble Approach	Mehmet Eren Ahsen, Mehmet Ayvaci		Designing engaging AI solutions for well-being	Nazli Usta	
16:00 - 16:30	Wrap-up and Setting a Future Research Agenda: Zlotnik Ballroom Salon 4					
	Speakers: Conference Co-chairs					
	Ritu Agarwal (Johns Hopkins Carey Business School)					
	Indranil Bardhan (UT Austin)					
	Guodong (Gordon) Gao (Johns Hopkins Carey Business School)					
	Jeff McCullough (University of Michigan)					
16:30	Conference Adjourn					

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