



Full Program Matrix

Key Bridge Marriott, 1401 Lee Hwy, Arlington, VA 22209

Friday, November 15, 2019						
8:30 - 9:00	Breakfast					
9:00 - 9:15	Welcome Remarks					
9:15 - 10:00	Opening Keynote					
	Speaker		Venue			
	Pamela Peele (Chief Analytics Officer, UPMC Health Plan and UPMC Enterprises)		Room 1/2			
10:00-10:15	Break					
10:15 - 11:00	Innovation Perspectives from Plan and Provider					
	Speakers		Venue			
	Nawar Shara (Director, Dept. of Biostatistics and Biomedical Informatics, MedStar Health Research Institute)		Room 1/2			
	Athena Abbott (Digital Strategist, Aetna CVS Health)t					
	Sanji Fernando (SVP of Artificial Intelligence and Analytics Platforms, Optum)					
	Moderator: Michelle Dugas (Post Doctoral Fellow, Center for Health Information & Decision Systems, University of Maryland)					
11:00 - 11:15	Break					
11:15 - 11:45	Conversational AI Panel					
	Speakers		Venue			
	Prithvi Rao (Executive Architect, US Federal Health, IBM)		Room 1/2			
	Ray Christian (CEO, Textpert)					
	Moderator: Kenyon Crowley (Deputy Director, Center for Health Information & Decision Systems, University of Maryland at					
11:45 - 12:45	Lunch					
12:45 - 14:05	1A. Patient Decision Making Regular Session			1B. Drug Abuse Regular Session		
	Session Chair:	Authors	Venue	Session Chair:	Authors	Venue
	<i>How do Humans interact with Algorithms? Experimental Evidence from Health Insurance</i>	Kate Bundorf, Maria Polyakova and Ming Tai-Seale	Room 1	<i>How Information Technology Can Help in the Fight Against an Opioid Epidemic: An Empirical Analysis of the Effect of E-Prescribing on Opioid</i>	Nakyung Kyung and Sanghee Lim	Room 2
	<i>What Influences Patients' Willingness to Follow Online Medical Advice?</i>	Jennifer Claggett, Brent Kitchens and Maria Paino		<i>The Impact of Data-Driven Interventions on Prescription Drug Overdose Mortality</i>	Min-Seok Pang and Sezgin Ayabakan	
	<i>Time Inconsistency in Medication Non-adherence: A Dynamic Model</i>	Jian Ni, Yonghong An and Yingyao Hu		<i>Drug Abuse and the Internet: Evidence from Craigslist</i>	Jiayi Liu and Anandhi Bharadwaj	
	<i>Spoiled for Choice? Personalized Recommendation for Healthcare Decisions: A Multi-Armed Bandit Approach with a Dynamic Discrete-Choice</i>	Tongxin Zhou, Yingfei Wang, Lu Yan and Yong Tan		<i>Discovering Barriers to Opioid Addiction Treatment Using Similarity Network-Based Deep Learning</i>	Jiaheng Xie, Zhu Zhang, Xiao Liu and Daniel Zeng	
14:05 - 14:30	Break					
14:30 - 15:30	2A. Social Media Research Panel			2B. AI Research Panel		
	Session Chair:	Authors	Venue	Session Chair:	Authors	Venue
	<i>Mining Health Messages from Unstructured Twitter Streaming Texts: A Topic Modeling Analysis of Health Tweets</i>	Hajjing Hao, Dan Zhu and Gang Han	Room 1	<i>Augmenting Radiologists' Decision Making Based on Mammography Using Deep Learning</i>	Mehmet Eren Ahsen and Mehmet Ayvaci	Room 2
	<i>Identifying the Drivers Behind User-Generated Content on Reddit: A Text Mining Approach</i>	Anton Ivanov, Zhasmina Tacheva and Mike Shaw		<i>Shock Prediction Using Vital Sign Time Series</i>	Iris Bennett and William Rand	
	<i>Engaging the Crowd: Shall We Tell stories or Provide Structured Content?</i>	Yiwen Gao, Sezgin Ayabakan and Sunil Wattal		<i>A Data-Driven Framework for Identifying Intensive Care Unit Admissions Colonized with Multidrug-Resistant Organisms</i>	Çağlar Çağlayan, Sean Barnes, Lisa Pineles, Eili Klein and Anthony Harris	
	<i>Syndrome and Parents' Discussion on the Same Healthcare Forum: A LDA Topic Modeling Approach</i>	Bu Zhong, Qian Liu and Akhil Kumar		<i>Impact of Data Balancing Methods on Machine Learning Model Performances on the Prediction of Hospital Readmission</i>	Farhan Fahim and Hua Min	
15:30 - 16:00	Break					
16:00-17:00	3A. Coordination and use of Digital Information Regular Session			3B. Organization Regular Session		
	Session Chair:	Authors	Venue	Session Chair:	Authors	Venue
	<i>Effect of EHR Use and Information Security Controls on Time-Sensitive Emergency Care Process Quality at US Hospitals</i>	Ajit Appari and Eric Johnson	Room 1	<i>What Explains Performance of Accountable Care Organizations: Learning or Selection Effects?</i>	Sezgin Ayabakan, Rajiv Banker and Indranil Bardhan	Room 2
	<i>Drivers of the Referral Network: How Does HIE Impact Physicians' Decisions?</i>	Saeede Eftekhari, Niam Yaraghi, Ram Gopal and Ram Ramesh		<i>The Doctor Will See You Elsewhere: Enterprise Information Systems and the Changing Permeability of Firm Boundaries</i>	Brad Greenwood and Russell Funk	

	Adoption of Mobile Health Applications against Alzheimer's Disease	Maximilian Haug, Heinz-Theo Wagner, Heiko Gewald and Laura Burth		Challenges and Opportunities with Governance of Personally Generated Health Data (PGHD)	Elizabeth Davidson, Jenifer Winter and Victoria Fan
17:00	Adjourn				
18:00 - 20:00	Networking Reception at Tony and Joe's Seafood Place				
Saturday, November 16, 2019					
8:00 - 8:30	Breakfast				
8:30-9:10	4A. Role of Information Research Panel 1			4B. AI Research Panel 2	
	Session Chair:	Authors	Venue	Session Chair:	Authors
	Health Information as Medical Intervention: A Multivariate Analysis of Health Information Processing Reducing Adolescent Depression	Bu Zhong and Juan Chen	Room 1	Classification with Feature and Algorithm Machine Learning Ensembles for Autism Spectrum Disorder	Yang Gu and Gondy Leroy
	Applying a Stage-Based Model of Information Behavior to Direct-to-Consumer Genetic Testing	Kenyon Crowley, Xinyan Zhao, Jonathan Brier, Joohee Choi, Yia Tausczik, Andrea Wiggins		Using Machine Learning to Estimate the Incidence of Unintended Births and Unintended Pregnancies at the Sub-state Level: An Application to Development of Machine Learning Algorithms that Identify Factors Associated with Timely Permanency in Foster Care Case Management	Keith Kranker, Sarah Bardin, Dara Lee Luca and So O'Neil
	The Dynamics of Real-Time Online Information and Disease Progression: Understanding Spatial Heterogeneity in the Relationship	Blake Tindol and Utkarsh Shrivastava			Monica Chiarini Tremblay and Rajiv Kohli
9:10-9:30	Break				
9:30-10:00	NIH Data Science Strategy				
	Speaker		Venue		
	Susan Gregurick (Associate Director for Data Science and Director, NIH Office of Data Science Strategy)		Room 1/2		
10:00-10:40	Academic Keynote				
	Speaker				
	Philip Resnik (Professor, Linguistics and Institute for Advanced Computer Studies, University of Maryland at College Park)		Room 1/2		
10:40-11:00	Break				
11:00-12:00	5A. AI Regular Session			5B. Social Media Regular Session	
	Session Chair:	Authors	Venue	Session Chair:	Authors
	Collaborative Intelligence in Healthcare: Augmenting Complex Tasks with Physician and Algorithm Fusion	Gaurav Jetley and He Zhang	Room 1	MedCrawl: Improving Public Health Outcomes through Effective and Efficient Social Listening	Ahmed Abbasi, Jennifer Claggett, Brent Kitchens and Hsinchun Chen
	Ask the Doctor if YouTube is Right for You: A Human Augmented Patient Educational Video Recommender System	Xiao Liu, Anjana Susarla and Rema Padman		Does Social Media Speed Up Product Recalls? Evidence From Pharmaceutical Industry	Yang Gao, Wenjing Duan and Huaxia Rui
	Artificial Intelligence and Drug Innovation	Bowen Lou and Lynn Wu		Do Yelp Reviews Influence Consumer Choice in the Presence of Government Ratings? Evidence from U.S. Nursing Homes	Yuanchen Li, Feng Lu and Xiaoyuan Lu
	How to Identify Good Older-Donor Kidneys?	Paola Martin, Diwakar Gupta and Timothy Pruett		Physician Payments Sunshine Act: The Impact of Information Disclosure Policy	Sherri Cheng, Wenjing Duan and Zhen Sun
12:00-12:10	Break				
12:10-13:10	Awards Lunch				
	MC				
	Kenyon Crowley (Deputy Director, Center for Health Information & Decision)		Room 1/2		
13:10 - 13:20	Break				
13:20-14:10	6A. Role of Information Research Panel 2			6B. mHealth Research Panel	
	Session Chair:	Authors	Venue	Session Chair:	Authors
	Beyond the Carrot and the Stick, the Role of Information-Based Methods on Reducing Healthcare Costs	Lina Bouayad, Balaji Padmanabhan and Kaushal Chari	Room 1	Contradictions and Opportunities in Mobile Care Management ("mCare"): An Observational Analytic Cohort Study	Kenyon Crowley
	Implications of Vital Sign Monitor and Electronic Medical Record Integration on Identification of Patients in Deteriorating Condition	Brandon Buxton, Jefton Knight and Utkarsh Shrivastava		Carrot or Stick? Check Weather First: The Effect of Weather on Mobile-Based Interventions for Physical Activity	Nakyung Kyung, Sanghee Lim and Byungtae Lee
	Interventions for Healthcare Professionals in Managing Opioid Prescriptions	Upkar Varshney		Evaluation of Patient Level Interventions for Opioid Abuse	Neetu Singh and Upkar Varshney
	Effects of Prosocial Behaviors on Economic Returns: Evidence from an Online Mental Health Platform	Lini Kuang and Zhijun Yan		The impact of corporate social engagement behavior on UGC and customer satisfaction in mobile health community	Wanxin Qiao, Zhijun Yan and Xiaohan Wang
14:10-14:50	7A. Frontline Research Panel			7B. Data Security and privacy Research Panel	
	Session Chair:	Authors	Venue	Session Chair:	Authors
	Success Factors in Implementing Machine Learning at Parkland Center for Clinical Innovation: The Case of Real-time Prediction of Patients at Risk for Developing an Electronic System of Patient Prescription Medication History	Arun Nethi, Manjula Julka, Monica Chiarini Tremblay and Rajiv Kohli	Room 1	Event Study of Data Breaches and Hospital IT Spending	Sung Choi, Jinhung Lee and Eric Johnson
	Where is My Goddamn Money? The Interplay between Healthcare Information Technologies and Unpaid Claims	Sezgin Ayabakan, Hilal Atasoy and Min-Seok Pang		Modeling Government Policy for Protecting Users' Privacy on Healthcare Websites	Ram Gopal, Hooman Hidaji, Sule Nur Kutlu, Raymond A. Patterson and Niam Yaraghi
				The Implications of Patient Data Security Considerations for EHR Interoperability and Downtime Recovery	Utkarsh Shrivastava, Jiahe Song and Bernard Han
14:50-15:00	Break				
15:00 - 15:30	Wrap-up and Setting a Future Research Agenda				
	Speakers		Venue		
	Ritu Agarwal (University of Maryland at College Park)		Room 1/2		

Guodong (Gordon) Gao (University of Maryland at College Park)

Jeff McCullough (University of Michigan)

15:30

Adjourn