Track Session (Moderator)		Manuscript	Authors	Room 320 Title
Thursday (3/21)				
1:00-2:00	Project and Organizational Management and Planning (Carrie Sturts Dossick)	CRC2024-D-23-00004	Kyudong Kim; Helena R. Tiedmann; Kasey M. Faust	Construction Industry Changes Induced by the COVID-19 Pandemic: Impacts on Work Productivity
		CRC2024-D-23-00135	Evan Dicks; Keith Molenaar	Identification of Critical Transportation Risk Factors using DEMATEL
		CRC2024-D-23-00670	Tarek Salama, Ph.D.; Hisham Said	Agility Assessment Tool for Modular and Offsite Construction (MOC) Organizations
		CRC2024-D-23-00255	Ali bayesteh; Ming Lu	Short-Term Planning of Municipal Drainage Infrastructure Maintenance Operations: Problem Statement and Optimization Formulation
2:30-3:30	Project and Organizational Management and Planning (Carrie Sturts Dossick)	CRC2024-D-23-00024	Islam El-adaway; Jeffrey Russell; Ramy Khalef; Fareed Salih; Gasser Ali	Identifying and Exploring Construction PM Evolutions and Research Directions
		CRC2024-D-23-00030	Osman Hulusi Turkyilmaz; Deniz Besiktepe	Exploring Decision-Making Methods in Lean Construction Tool Selection
		CRC2024-D-23-00041	Hyun Jeong Koo, Ph.D.; David Kelly	Investigating Perception Variances among Project Participants concerning the Challenges of Renovating Historic Buildings
		CRC2024-D-23-00045	Amrit Shahi; Jin Ouk Choi, Ph.D.; Young Hoon Kwak	New and Emerging Modularization Business Drivers in Industrial Projects
4:00-5:30	Project and Organizational Management and Planning (Rebecca Kassa)	CRC2024-D-23-00046	Amrit Shahi; Jin Ouk Choi, Ph.D.	Identifying Key Modularization Decision Factors in Industrial Projects
		CRC2024-D-23-00531	Abdullah Alsharef, Ph.D.; Anto Ovid; S M Jamil Uddin; Alex Albert	Biggest Challenges Facing the Construction Industry
		CRC2024-D-23-00111	Sreelakshmi S, Ph.D.; Ashwin Mahalingam	WHAT DOES BIM ADOPTION MEAN TO CONSTRUCTION FIRMS? – A CASE FROM INDIAN CONSTRUCTION INDUSTRY
		CRC2024-D-23-00168	Sepehr Khorshid; Siyuan Song; Raissa Seichi Marchiori; Peiyi Lyu	From Heat to Cold: Examining the Preparedness of Construction Projects During Unprecedented Winter Storms in the South
		CRC2024-D-23-00469	Linda A. Odhiambo, Edward J. Jaselskis, and Alex Albert	FIT-FOR-PURPOSE HANDBOOK DEVELOPMENT FOR THE UPSTREAM, MIDSTREAM, AND MINING (UMM) SECTORS
Friday (3/22)				
9:30-10:30	Project and Organizational Management and Planning (Jin Ouk Choi)	CRC2024-D-23-00161	Anthony E. Sparkling, Ph.D.; Kyubyung Kang	State-of-Practice in Electrical Contracting and Infrastructure Opportunities in the United States
		CRC2024-D-23-00165	Makram Bou Hatoum, Ph.D.; Hala Nassereddine; Mahmoud El Jazzar	Achieving Agile and Transformative Change Efforts in Capital Project Organizations
		CRC2024-D-23-00115	Asitha Rathnayake; Danny Murguia; Campbell Middleton	Measurement of Construction Productivity: State of the Practice in the UK
		CRC2024-D-23-00179	Muhammad Amir Hamza Khan; Elnaz Asadian; Robert Leicht	Identifying Elements for Lean Construction Implementation in Trade Contractor Organizations
11:00-12:00	Project and Organizational Management and Planning (Jin Ouk Choi)	CRC2024-D-23-00193	Rana Khallaf; Kareem Othman; Jose Guevara; Gabriel Castelblanco, Ph.D.	A SYSTEM DYNAMICS MODEL FOR A NATIONAL PPP PROGRAM: THE EGYPTIAN PROJECT PORTFOLIO
		CRC2024-D-23-00214	Sanjeev Adhikari; Pavankumar Meadati; Druthi Katragadda	Identify applications of AR in the Construction Industry
		CRC2024-D-23-00209	Fahad K. Alqahtani, PhD; Eid K. Alagha; Ahmed Gouda Mohamed	Critical Success Factors of Public-Private Partnership for Urban Infrastructure Projects in Saudi Arabia
		CRC2024-D-23-00016	Mohamad Abdul Nabi; Bahaa Chammout; Islam El-adaway; Rayan Assaad; Ghiwa Assaf	Investigating Price Fluctuation Transmission Among Construction Materials
1:30-2:30	Project and Organizational Management and Planning (Eugenio Pellicer)	CRC2024-D-23-00019	Tamima Elbashbishy; Islam El-adaway	Assessing the Impact of Skilled Labor Shortages on Project Cost Performance
		CRC2024-D-23-00278	Shani Alexandra Montes Victorio, Master of Science; Roy E. Sturgill	Review of Effective Practices for Managing Utility Coordination Stakeholders in Highway Projects
		CRC2024-D-23-00276	Cristian Camilo Osorio, Ph.D (Current); Cristhian Camilo Amariles López; Rodrigo Herrera; Eugenio Pellicer	BIM IMPLEMENTATION IN SMALL & MEDIUM-SIZED COMPANIES IN THE COLOMBIAN CONSTRUCTION SECTOR
		CRC2024-D-23-00548	HASAN GOKBERK BAYHAN; Sinem Mollaoglu; Kenneth Frank	Team Collaborations During Time of Disruptions: Transaction Costs and Social Network Perspective with Hierarchical Linear Modeling
2:45-3:45	Project and Organizational Management and Planning (Eugenio Pellicer)	CRC2024-D-23-00541	Abdullah Alsharef, Ph.D.; S M Jamil Uddin; Siddharth Banerjee; Anto Ovid; Alex Albert	Information Sources and Lessons Learned by Construction Organizations during the early Months of the COVID-19 Pandemic in the U.S.
		CRC2024-D-23-00422	Avinash Aruon; Tripp Shealy	Are we on the same wavelength: Exploring inter-brain synchrony of engineering student teams when designing and building
		CRC2024-D-23-00199	Esraa Y. Hyarat; Laura Montalban-Domingo; Tatiana García Segura; Amalia Sanz-Benlloch; Eugenio Pellicer, Ph.D.	CRITICAL SUCCESS FACTORS TO LEAN CONSTRUCTION IMPLEMENTATION: A SYSTEMATIC LITERATURE REVIEW
		CRC2024-D-23-00415	Felipe Araya, Ph.D.; Katia Ogalde; Leonardo Sierra	A Critical Review of Impacts from the COVID-19 Pandemic in Construction Projects: What Have We Learned?
Saturday (3/23)				
8:45-9:45	Project and Organizational Management and Planning (Ziyu Jin)	CRC2024-D-23-00329	Elyar Pourrahimian, M.Sc; Diana Salhab; Lynn Shehab; Simaan AbouRizk; Farook Hamzeh	Application of Chaos Theory in Project Management
		CRC2024-D-23-00132	Piyush Pradhananga; Mohamed ElZomor	Bridging the Gap to Success: Developing Accelerated Bridge Construction (ABC) Success Index Tool for Pre-Project Planning
		CRC2024-D-23-00080	Shafayet Ahmed; Ziyu Jin	Methodology to measure the efficiency of scientific decision-making frameworks to select the preferred building material
		CRC2024-D-23-00540	Meltem Duva; Sinem Mollaoglu; Dong Zhao; Kenneth A. Frank	Evaluating the Impact of Micro-Level Changes on Macro-Level Network Structures in AEC Project Teams
10:00-11:00	Project and Organizational Management and Planning(Ziyu Jin)	CRC2024-D-23-00281	SeogJae Choi, MSE	Identifying the Job Characteristics Affecting Construction Firm Employee Turnover Intention
		CRC2024-D-23-00542	Miaosi Dong, M.D.; Pingbo Tang; Burcu Akinci; Ruoxin Xiong	Stabilizing Manufacturing Lines of Customized Building Mechanical Components Under Uncertain Machinery Deteriorations
		CRC2024-D-23-00547	HASAN GOKBERK BAYHAN; Sinem Mollaoglu; Kenneth Frank	Line of Privity's Effect on Project Performance: A Case Study
		CRC2024-D-23-00266	Mahya Sam; Bryan Franz	Evaluating vulnerability to uncertainty in human-robot collaboration: A case study in drywall finishing
11:15-12:15	Project and Organizational Management and Planning(Ziyu Jin)	CRC2024-D-23-00559	Xinran Hu, Ph. D.; Yunfeng Chen	BIM's Impact on Project Management Performance
		CRC2024-D-23-00689	Parshva Patel; Roy Sturgill	An Assessment of As-Built Accuracy Using Ground-Based Photogrammetry Compared to Traditional GPS Survey
		CRC2024-D-23-00017	Muaz Ahmed; Islam El-adaway	EXPLORING THE INFLUENCES ON CONSTRUCTION BIDDING DECISIONS: INSIGHTS FROM LITERATURE AND INDUSTRY EXPERTS
		CRC2024-D-23-00345	Oscar Humberto Portilla Carreño, MsC; Guillermo Mejía Aguilar; David Grau	EARLY DEFINITION MATRIX OF LOW-COST HOUSING PROJECTS FOR DEVELOPING COUNTRIES

	Track Session (Moderator)	Manuscript	Authors	Room 319
				Title
Thursday (3/21)				
1:00-2:00	Advanced Technologies and Data Analytics (David Grau)	CRC2024-D-23-00388	Hossein Naderi; Reachsak Sak; Alireza Shojaei	From Data to Value: Introducing an NFT-powered Framework for Data Exchange of Digital Twins in the AEC Industry
		CRC2024-D-23-00029	Cansu Coskun and Deniz Besiktepe	A Review of BIM and Advanced Technologies in Facility Condition Assessment
		CRC2024-D-23-00257	Rosina Adhikari; Houtan Jebelli	Deep Learning and Reinforcement Learning for Modeling Occupants Information in an Occupant-Centric Building Control: A Systematic Literature Review
		CRC2024-D-23-00325	Shengyi Wang; Nora El-Gohary	Semantic Segmentation of Bridge Components from Various Real Scene Inspection Images
2:30-3:30	Advanced Technologies and Data Analytics (David Grau)	CRC2024-D-23-00258	Amit Ojha; Houtan Jebelli	Quantifying the Implications of Humidity and Temperature on Heat Stress Exposure of Construction Workers: A Worker-Centric Physiological Sensing Approach
		CRC2024-D-23-00068	Sheik Murad Hassan Anik; Xinghua Gao, Ph.D.; Na Meng	Automation in Building Occupant Profile Development: A Machine Learning- and Persona-enabled Approach
		CRC2024-D-23-00093	Da Hu, Ph.D.; Junxuan Zhao	Segmentation and Tracking of Moving Objects on Dynamic Construction Sites
		CRC2024-D-23-00094	Yoojun Kim; Youngjib Ham	Heat stress monitoring in construction for risk-informed decision-making
4:00-5:30	Advanced Technologies and Data Analytics (Kasey Faust)	CRC2024-D-23-00095	Jinsol Lee; Youngjib Ham	FEEDBACK SYSTEM FOR ENHANCING HUMAN-ROBOT INTERACTION PERFORMANCE IN CONSTRUCTION ROBOT
		CRC2024-D-23-00184	Araham Jesus Martinez Lagunas, MEng; Soroush Abbaspour; Mazdak Nik-Bakht	NLP for Automated Discovery and Assessment of Dominant Construction and Maintenance Work Order Activities in MEP Projects
		CRC2024-D-23-00121	Hyun Jeong Koo, Ph.D.; Beatriz C Guerra	Clash relevance prediction in BIM model coordination using Artificial Neural Network
		CRC2024-D-23-00129	Kasra Banijamali; Ali Kazemian, PhD	Early-age Strength Monitoring of Sensor-Embedded 3D Printed Structures
		CRC2024-D-23-00621	Liqun Xu; Xiaowei Luo; Hexu Liu; Fei Dai; Zhenhua Zhu	Synthetic Simulated Data for Construction Automation: A Review
Friday (3/22)				
9:30-10:30	Advanced Technologies and Data Analytics (Youjin Jang)	CRC2024-D-23-00099	Miran Seo; Youngjib Ham	Evaluation of Work Performance, Task Load, and Behavior Changes on Time-Delayed Teleoperation Tasks in Space Construction
		CRC2024-D-23-00451	Divine Agbobli; Yunjeong Mo	Understanding the Impact of the Covid-19 Pandemic on Residential Energy-Use-Related Activity Trends and Patterns Using the American Time Use Survey Data
		CRC2024-D-23-00400	Amir Sanatgar; Mazdak Nik-Bakht	A Taxonomy for Change Management Process in Construction Projects
		CRC2024-D-23-00100	Vartenie Aramali, Ph.D.; Namho Cho; Darrell Mesa	PRELIMINARY STUDY USE OF LARGE GENERATIVE ARTIFICIAL INTELLIGENCE MODELS IN INTEGRATED PROJECT MANAGEMENT
11:00-12:00	Advanced Technologies and Data Analytics (Youjin Jang)	CRC2024-D-23-00205	Jinwoong Lee; Kyubyung Kang, Ph.D.	Hot Thermal Discomfort-related Action Recognition Model Validation in Outdoor Construction Environments
		CRC2024-D-23-00048	Abdolmajid Erfani; Jina Mahmoudi; Qingbin Cui	Measuring Social Equity in Pavement Conditions Using Big Data
		CRC2024-D-23-00078	Issam Srour; Omar Yamout	PREDICTIVE CONSTRUCTION EQUIPMENT MAINTENANCE USING NEURAL NETWORKS
		CRC2024-D-23-00353	Rafaela Orenga Panizza; Mazdak Nik-Bakht	Labeling Construction, Renovation, and Demolition Waste through Segment Anything Model (SAM)
1:30-2:30	Advanced Technologies and Data Analytics (Adedeji Afolabi)	CRC2024-D-23-00287	Mohsen Mohammadi; Rayan H. Assaad; Aichih (Jasmine) Chang	An Intelligent and Dynamic Pricing IoT Model to Stimulate the Use of Shared Economies in Smart Cities
		CRC2024-D-23-00296	Andres Leonardo Acero Molina; Yilei Huang; Mostafa Namian	Comparing the Accuracy between UAS Photogrammetry and LIDAR in Bridge Inspections
		CRC2024-D-23-00306	Md Ala Uddin; Yoojung Yoon; Monique Head; Qozeem Abiona Olatunbosun	Determination of Grouping Factors for Bridge Components Deterioration Analysis
		CRC2024-D-23-00441	Yogesh Gautam; Houtan Jebelli	Unsupervised Adversarial Domain Adaptation in Wearable Physiological Sensing for Construction Workers' Health Monitoring Using Photoplethysmography
2:45-3:45	Advanced Technologies and Data Analytics (Adedeji Afolabi)	CRC2024-D-23-00103	Yeon Chae; Youngjib Ham	Design and Evaluation of Human-centered Visualization Interfaces in Construction Teleoperation
		CRC2024-D-23-00055	Xiaoyue Zhang; Chengcheng Tao, Ph.D.; Ying Huang	Pipeline Integrity Analysis Through Data-Driven Approaches
		CRC2024-D-23-00351	Hossein Naderi; Mohammadhossein Heydari; Alireza Shojaei	Applications of Tokenization in the Architecture, Engineering, and Construction (AEC) Industry
		CRC2024-D-23-00267	Amit Tripathi; Roy E. Sturgill; Gabriel B Dadi; Hala Nassereddine	INVESTIGATING IMPLEMENTATION FACTORS FOR SUCCESSFUL TECHNOLOGY IMPLEMENTATION AT STATE DOTS
Saturday (3/23)				
8:45-9:45	Advanced Technologies and Data Analytics (Baris Salman)	CRC2024-D-23-00385	Jinwu Xiao; Dahyun Oh; Ha Kyun Ju; Kyubyung Kang, Ph.D.	Hydrant Segmentation and Extraction Using Deep Learning Models for Large-Scale Urban Point Clouds
		CRC2024-D-23-00174	Oscar Wong Chong, Ph.D.; Jiansong Zhang	AUTOMATED EXTRACTION OF LOCATIONAL INFORMATION FROM IFC-BASED BUILDING INFORMATION MODELS
		CRC2024-D-23-00176	Yizhi Liu; Houtan Jebelli	ENHANCING HUMAN-CENTRIC PHYSIOLOGICAL DATA-DRIVEN HEAT STRESS ASSESSMENT IN CONSTRUCTION THROUGH A TRANSFER LEARNING-BASED APPROACH
		CRC2024-D-23-00411	Inbae Jeong, Ph.D.; Jisoo Park; Youjin Jang; Kyle Nietfeld	Remote Virtual Inspection of Infrastructure in Metaverse
10:00-11:00	Advanced Technologies and Data Analytics (Baris Salman)	CRC2024-D-23-00488	Kaiyu Huang; Kaijian Liu	Recognizing Daily Human Activities Using Nonintrusive Sensing and Analytics for Supporting Human-Centered Built Environments
		CRC2024-D-23-00023	Fareed Salih; Islam El-adaway	ACHIEVING PROJECT OBJECTIVES AND IMPROVING FUNCTIONS: THE BENEFITS OF AI AND CONSTRUCTION TECHNOLOGIES
		CRC2024-D-23-00458	Pouria Mohammadi; Abbas of Rashidi; Sadegh Asgari	Improving Culvert Condition Prediction Models Using Federated Learning: The Case Study of Utah
11:15-12:15	Advanced Technologies and Data Analytics (Baris Salman)	CRC2024-D-23-00474	Yajie Liu; Kevin Han; William Rasdorf	A Comparison of Accuracy of UAS Photogrammetry in Different Terrain Sites
		CRC2024-D-23-00478	Seongyong Kim; Yong Kwon Cho	Construction Scene Segmentation using 3D Point Clouds: A Dataset and Challenges
		CRC2024-D-23-00484	Parisa Sanaei; Baris Salman	Use of Photogrammetry and Laser Scanning Technologies in Runway Inspections
		CRC2024-D-23-00429	Haui-En Cheng; Thai-Hoa Le; Jacob J. Lin	MULTI-USER MIXED-REALITY COLLABORATION FRAMEWORK FOR ONSITE MEP COORDINATION

	Track Session (Moderator)	Manuscript	Authors	Room 318 Title
Thursday (3/21)				
1:00-2:00	Advanced Technologies and Data Analytics (Ricardo Eiris)	CRC2024-D-23-00628	Navid Nickdoost; Juyeong Choi	A Composite Index Framework for Data-driven Decision-making in the Construction Industry
		CRC2024-D-23-00502	VAMSI SAI KALASAPUDI, Ph.D.; Bharadwaj R. K. Mantha; Kavyaa Boopathy; Yang Zou	A Survey Based Investigation to Understand the Influence of an Augmented Reality based Application on the Home Remodeling Market
		CRC2024-D-23-00523	Ahmad Akib Uz Zaman; Ahmed Abdelaty	Limitations and Barriers Affecting the Applications of UAVs in Transportation Infrastructure Systems Assessment
2:30-3:30	Advanced Technologies and Data Analytics (Ricardo Eiris)	CRC2024-D-23-00524	Behnam M. Tehrani, MSc.; Chao Xie; Aladdin Alwisy	A Framework for Automated Quality Control of Wood-framed Panels in Robotic-based Manufacturing Using Computer Vision and Deep Learning
		CRC2024-D-23-00539	Omobolanle Ogunseiju; Abiola Akanmu	Cognitive Load Within Mixed Reality Learning Environment in Construction Education
		CRC2024-D-23-00543	Nidia Bucarelli; Nora El-Gohary	Sensor Locations for Occupant Thermal Comfort State Prediction
		CRC2024-D-23-00546	Behlul Kula; Andreana Louise Roxas; Kristen Cetin; George Berghorn; Annick	Development and Evaluation of an Energy Assessment Process Using Virtual Reality Technology
4:00-5:30	Advanced Technologies and Data Analytics (Nora El-Gohary)	CRC2024-D-23-00494	Nhien Dinh Le, Ph.D; Dan Tran	Use of Non-Destructive Testing Technologies for Highway Infrastructure Inspection
		CRC2024-D-23-00553	Lei Shu, Ph.D.; Dong Zhao	Data-driven residence energy consumption prediction model considering water use data and socio-demographic data
		CRC2024-D-23-00570	Sisi Han; Yuhan Jiang, Ph.D.; Yong Bai	Experimental Evaluation of Convolutional Neural Networks in Asphalt Concrete Computed Tomography Scan Image Analysis
		CRC2024-D-23-00625	Jing Wen, PhD	Review on Digital Twin Applications in Construction by Maturity Level
		CRC2024-D-23-00324	Qiyang Chen; Nora El-Gohary	DEEP LEARNING-BASED COREFERENCE RESOLUTION FOR BRIDGE REPORT ANALYTICS
Friday (3/22)				
9:30-10:30	Advanced Technologies and Data Analytics (Joseph Louis)	CRC2024-D-23-00589	Linjun Lu; Zhenhua Zhu; Fei Dai	An Investigation on Accurate Road User Location Estimation in Aerial Images Collected by Drones
		CRC2024-D-23-00495	Nhien Dinh Le, Ph.D; Dan Tran	Exploring Remote Sensing and Monitoring Technology for Highway Infrastructure Inspection
		CRC2024-D-23-00643	Quan Miao; Meiyin Liu	Vision-based 6-DoF Pose Estimation of Forklift and Load for On-site Stability Check
		CRC2024-D-23-00519	Shun-Hsiang Hsu; Mani Golparvar-Fard	Requirements for Parametric Design of Physics-based Synthetic Data Generation for Learning and Inference of Defect Conditions
11:00-12:00	Automation in Construction (Joseph Louis)	CRC2024-D-23-00613	Hiba Jalloul; Ahmad Alshami; Navid Nickdoost; Jinyeong Moon; Juyeong Choi	Automated Material Separation Activity Identification for Sustainable Demolition Operations
		CRC2024-D-23-00616	Xin Wang; Dharmaraj Veeramani; Fei Dai; Zhenhua Zhu	Eye Gaze and Hand Gesture-Driven Human-Robot Interaction in Construction
		CRC2024-D-23-00633	Yining Wen; Kaiwen Chen	Autonomous Detection and Assessment of Indoor Building Defects using Multimodal Learning and GPT
		CRC2024-D-23-00638	Sueed Willoughby; Muhammad Tahir Khan; Chao Wang	Understanding Fill Factor vs. Fuel Efficiency for Excavator Operation: A Case Study of Bench Loading
1:30-2:30	Automation in Construction (Bing Han)	CRC2024-D-23-00645	Wei Han; Fei Dai; Zhenhua Zhu	VISION-BASED TURN SIGNAL RECOGNITION FOR AUTOMATED FLAGGING
		CRC2024-D-23-00652	Chonnapat Opanasopit; Joseph Louis	Automated Detection of Roadway Obstructions using UAVs and Reference Images
		CRC2024-D-23-00683	Chris Rausch	Digital Fab-to-Field: Regenerative BIM for 2D Panelized Construction
		CRC2024-D-23-00248	Jiahao Wu; Yang Ye; Jing Du, PhD	Multi-Objective Reinforcement Learning for Autonomous Drone Navigation in Urban Area
2:45-3:45	Computer Applications, Information Modeling, and Simulation (Bing Han)	CRC2024-D-23-00003	Bing Han, Ph.D.; Caroline M. Clevenger	Pilot Testing a Model-independent Indoor Augmented Reality Wayfinding Assistant for Grocery Stores Applications
		CRC2024-D-23-00067	Deirdre Edward; Minerva Bonilla, M.S.; Junseok Kim	Machine Learning Predictive Model: Prioritizing Expenditures in Public Transportation Based on Transportation Emissions
		CRC2024-D-23-00069	Ping Xu; Xinghua Gao, Ph.D.	Agent-based Discrete-event Simulation Platform Using BIM for Robotic Studies
		CRC2024-D-23-00109	Rita Awwad; Mohamed Eid, Ph.D.; Amr Mekki	AN AGENT BASED MODELING APPROACH FOR EVALUATING DYNAMIC RISK BEHAVIOR IN COMPETITIVE BIDDING
Saturday (3/23)				
8:45-9:45	Computer Applications, Information Modeling, and Simulation (Dan Tran)	CRC2024-D-23-00150	Sena Assaf; Fatima Alsakka; Mohammad Darwish; Mohamed Al-Hussein	Simulation-based Analysis of a Precast Factory Layout to Reduce Labor Travel Time and Production Time
		CRC2024-D-23-00315	Kofi A.B. Asare; Rui Liu; Chimay J. Anumba	Facilities Management Professionals' Perceptions of Digital Twins as Intelligent Realities
		CRC2024-D-23-00200	Hengxu You; Yang Ye; Fang Xu; Jing Du, PhD	Adaptive Scanning for Improved Stacked Object Detection with RGB and LiDAR
		CRC2024-D-23-00294	Yasser Jezzini; Rayan H. Assaad	Mitigating the Social Challenges of Green Infrastructure: A Social Vulnerability Index
10:00-11:00	Computer Applications, Information Modeling, and Simulation (Dan Tran)	CRC2024-D-23-00328	Da Hu; Mengjun Wang; Ruichen Guo; Shuai Li	Bridge Deck Condition Assessment Using GPR: System Configuration and Defects Characterization
		CRC2024-D-23-00256	Chi Tian; Yunfeng Chen; Yiheng Feng; Jiansong Zhang	Fine-Tuning Vision Transformer (ViT) to Classify Highway Construction Workers' Activities
		CRC2024-D-23-00275	Ahmed Gouda Mohamed; Mohamed Marzouk	A Semantic Hybrid Scheme for Efficient Building Facilities Management
		CRC2024-D-23-00277	Morteza Ghasemi; Mohammad Sadra Rajabi	Automation of Multi-Tower Crane Location Optimization in Pre-Fabricated Construction Sites: An Application Programming Interface Approach
11:15-12:15	Computer Applications, Information Modeling, and Simulation (Dan Tran)	CRC2024-D-23-00218	Jaehyun Park, Ph.D.	Framework for Managing Multiple Common Data Environments
		CRC2024-D-23-00196	Noelia Molinero-Perez; Tatiana García Segura; Laura Montalban-Domingo; Amalia Sanz-Benlloch; Jordi Mansanet; Eugenio Pellicer, Ph.D.	ARTIFICIAL INTELLIGENT TECHNIQUES TO IMPROVE PAVEMENT MAINTENANCE MANAGEMENT
		CRC2024-D-23-00318	Kareem Mostafa; Hani Ahmed; Tarek Hegazy	Prioritizing and Work Packaging of Multi-Facility Rehabilitations using Text Mining
		CRC2024-D-23-00225	Reihaneh Samsami, Ph.D., P.E.; Amlan Mukherjee; Colin N Brooks	AS-BUILT BUILDING INFORMATION MODEL (BIM) DEVELOPMENT FOR HIGHWAY CONSTRUCTION PROJECTS USING UNCREWED AERIAL SYSTEM (UAS) DATA

	Track Session (Moderator)	Manuscript	Authors	Room 317 Title
Thursday (3/21)				
1:00-2:00	Automation in Construction (Tuyen Robert Le)	CRC2024-D-23-00060	Guofeng Qiang; Shu Tang, Ph.D; Jianli Hao; Luigi Di Sarno	A BIM and AIoT Integration Framework for Improving Energy Efficiency in Green Buildings
		CRC2024-D-23-00084	Ilerioluwa Giwa; Ali Kazemian, PhD	Planetary Robotic Construction Using Large-Scale 3D Printing with Sulfur Concrete
		CRC2024-D-23-00096	Jiansong Zhang, Ph.D.	IFC-based Semantic Segmentation and Semantic Enrichment of BIM for Bridges
2:30-3:30	Automation in Construction (Tuyen Robert Le)	CRC2024-D-23-00125	Hang Li; Jiansong Zhang, Ph.D.	Information Extraction for Semantic Enrichment of BIM for Bridge
		CRC2024-D-23-00239	Aliu Akinsemoyin; Ibukun Awolusi; Sandeep Langar	Framework For UAV-BIM Integration for Proactive Hazard Identification in Construction
		CRC2024-D-23-00172	Fangxiao Li, Ph.D.; Ziyi Wang; Yuqing Hu; Robert Leicht	Validation of a Construction Robotics Schema for Site Operation Planning
		CRC2024-D-23-00177	Yizhi Liu; Houtan Jebelli	STUDYING THE EFFECTS OF BACK-SUPPORT EXOSKELETONS ON WORKERS' COGNITIVE LOAD DURING MATERIAL HANDLING TASKS
4:00-5:30	Automation in Construction (Ibukun Awolusi)	CRC2024-D-23-00188	Hieu T.T.L. Pham, Ph.D; SangUk Han	An Application of Cycle GAN for Creating Generated Real Training Images with 3D Excavator Pose Labels from a Synthetic Model
		CRC2024-D-23-00344	Mohammadhossein Heydari; Hossein Naderi; Alireza Shojaei	BIM and blockchain integration in construction procurement planning
		CRC2024-D-23-00222	Ziyi Wang; Yuqing Hu; Robert Leicht	AUTOMATED CONSTRUCTABILITY ASSESSMENT FOR ROBOTICS IN CONSTRUCTION: CASE STUDY OF CANVAS
		CRC2024-D-23-00140	Yara Nassar; Gilles Albeaino; Masoud Gheisari; Idris Jeelani; Raja R. A. Issa	Human-Robot Collaboration Levels in Construction: Focusing on Individuals' Cognitive Workload
		CRC2024-D-23-00101	Tamoghna Ghosh; Arpit Sethi; Jiansong Zhang, Ph.D.	Automation in Construction Contract Analysis and Management
Friday (3/22)				
9:30-10:30	Automation in Construction (Jiun Yao Cheng)	CRC2024-D-23-00298	Lijun Liu; Yilei Huang; Yuhan Jiang	Developing A Logistic Chain-Enabled BIM System for Material Management in Modular Construction
		CRC2024-D-23-00220	Zirui Hong; Hubo Cai	AN ONTOLOGY FOR NATURAL COMMUNICATION IN HUMAN-ROBOT COLLABORATION IN CONSTRUCTION
		CRC2024-D-23-00254	Fang Xu; Hengxu You; Tianyu Zhou; Jing Du, PhD	Telepresence Robotic Operating System with Mixed Reality
		CRC2024-D-23-00282	Hevar Palani, Ph.D. Student; Aslihan Karatas; Todd Taylor	Cost-Effective Hot Box Apparatus to Measure Thermal Performance of Building Envelopes
11:00-12:00	Automation in Construction (Jiun Yao Cheng)	CRC2024-D-23-00290	Xi Hu; Rayan H. Assaad	Automated Heat Stress Monitoring and Water Spraying Robotic System for Improving Work Conditions Using Drone (UAV) Infrared Thermography
		CRC2024-D-23-00098	Jiansong Zhang, Ph.D.	Natural Language Processing for Construction Management: A Literature Review
		CRC2024-D-23-00302	Srijeet Halder; Kereshmeh Afsari	Challenges of Human-Robot Partnership in Future Construction Inspection and Monitoring with a Quadruped Assistant Robot
		CRC2024-D-23-00303	Mengjun Wang; Shuai Li	Robotic Assembly of Interlocking Blocks for Construction Based on Large Language Models
1:30-2:30	Automation in Construction (Meltem Duva)	CRC2024-D-23-00250	Kinam Kim, Ph.D.; Jainish Shah	MOTION INTENTION RECOGNITION OF CONSTRUCTION WORKERS FOR HUMAN-ROBOT COLLABORATION IN CONSTRUCTION
		CRC2024-D-23-00588	Austin D McClymonds; Somayeh Asadi	Utilizing Parametric Computational Modeling to Generate Masonry Wall System to Facilitate Robotic Task Creation
		CRC2024-D-23-00365	Hafiz Oyediran; Kyungki Kim; Pei Chi Huang	Human-Aware Safe Robot Control and Monitoring System for Operations in Congested Indoor Construction Environment
		CRC2024-D-23-00381	Juan Diego Nunez-Morales; Yoonhwa Jung; Mani Golparvar-Fard	Bi-Directional Image-to-Text Mapping for NLP-Based Schedule Generation and Computer Vision Progress Monitoring
2:45-3:45	Automation in Construction (Meltem Duva)	CRC2024-D-23-00383	Fan Yang; Jiansong Zhang, Ph.D.	Application of Graph Convolutional Networks to Classification of Building Code Requirements
		CRC2024-D-23-00597	Nilay R. Choudhury; Yining Wen; and Kaiwen Chen	Natural Language Navigation for Robotic Systems: Integrating GPT and Dense Captioning Models with Object Detection in Autonomous Inspections
		CRC2024-D-23-00402	Xiaoyun Liang; Jiannan Cai, Ph.D.	Analyzing Human Visual Attention in Human-Robot Collaborative Construction Tasks
		CRC2024-D-23-00534	Mariam Tomori; Omobolanle Ogunseiju; Chuma Nnaji	A Review of Human Robotics Interactions in the Construction Industry
Saturday (3/23)				
8:45-9:45	Automation in Construction (Hang Li)	CRC2024-D-23-00366	Hafiz Oyediran; Kyungki Kim	Information Modeling for Construction Robot Task Planning and Simulation in 4D BIM
		CRC2024-D-23-00434	Yuzhen He; Xianzhong Zhao; Weifang Xiao	An intelligent seam detection method for welding robots based on image guided point cloud registration
		CRC2024-D-23-00463	Doyun Lee; Kevin Han	UNMANNED GROUND VEHICLE AND ROBOTIC ARM INTEGRATION FOR AUTOMATED WELDING
		CRC2024-D-23-00477	YeSeul Kim, Ph.D.; Yong K. Cho	How much distance should a robot keep from other workers at construction job sites?
10:00-11:00	Automation in Construction (Hang Li)	CRC2024-D-23-00407	Simge Girgin; Renate Fruchter; Martin Fischer	A Comparative Case Study to Assess the Costs and Benefits of VR Use during Preconstruction MEP Coordination
		CRC2024-D-23-00556	Anto Ovid; Abdullah Alsharef; S M Jamil Uddin; Alex Albert	APPLIED AI AND ROBOTICS FOR CONSTRUCTION OPERATIONS – A SMART REVIEW OF THE STATE OF THE SCIENCE
		CRC2024-D-23-00581	Mohammadsoroush Tafazzoli; Mostafa Namian; Ahmed Al-Bayati	Investigating Barriers to the Application of Automation in the Construction Industry
		CRC2024-D-23-00574	Siqi Chen; Shanyue Guan, Ph.D.; Zhen Zhu	UAS-Based LiDAR System For Bulk Pile Volume Measurement
11:15-12:15	Automation in Construction (Hang Li)	CRC2024-D-23-00572	Elnaz Safapour	Workforce Essential Hard and Soft Skills for Construction 4.0
		CRC2024-D-23-00350	Reachsak Ly; Alireza Shojaei; Hossein Naderi	DT-DAO: Digital Twin and Blockchain-based DAO Integration Framework for Smart Building Facility Management
		CRC2024-D-23-00590	Amirpooya Shirazi; Kyungki Kim	Development of Rule-Based Safety Checking System for Autonomous Heavy Construction Equipment
		CRC2024-D-23-00401	Jiannan Cai, Ph.D.; Yuqing Hu; Xiaohong Xu; Shuai Li	Equipment Teleoperation and Its Impacts on Future Worker and Workforce in Construction: Semi-Structured Interviews

Track Session (Moderator)	Manuscript	Authors	Room 316 Title
Thursday (3/21)			
1:00-2:00 Sustainability and Resilience-1a (Issan Srour)	CRC2024-D-23-00289	Xi Hu; Rayan H. Assaad	Automatic Detection of Natural Hazard-Induced Power Grid Infrastructure Faults Using Computational Intelligence
	CRC2024-D-23-00051	Junyi Duan; Chengcheng Tao, Ph.D.	Improving Flood Resilience of Bridge Infrastructure Through Fluid, Structural and Risk Modeling
	CRC2024-D-23-00025	Gasser Ali; Islam El-adaway	DISTRIBUTED SOLAR GENERATION: DATA ANALYTICS OF THE EXISTING LITERATURE FOR GUIDING THE FUTURE PROSPECTS
	CRC2024-D-23-00037	Niousha Talebpour; Mohammad Ilbeigi	CITIZENS' SOCIOECONOMIC BACKGROUND AND THEIR ENERGY ACCESSIBILITY DURING EXTREME EVENTS
2:30-3:30 Sustainability and Resilience-2a (Issan Srour)	CRC2024-D-23-00053	Joy Gao; Xiaoyue Zhang; Chengcheng Tao, Ph.D.	Machine Learning-based Risk Analysis for Infrastructure Vulnerable to Flood Hazard
	CRC2024-D-23-00075	Aida Mollaei, PhD, MES; Guilherme Eliote; Beatriz Guerra; Sheida Shahi; Fernanda Leite; Carl Haas; Olaf Weber	A Transition Management Framework for implementing Circular Economy in the Construction Industry
	CRC2024-D-23-00082	Issam Srour; Antoinette Abou Jaoude	A METHODOLOGY TO DEVELOP MASTER PLANS FOR CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT
	CRC2024-D-23-00116	Yohan Min, Hyun Woo Lee, Novi Bramono, and Erin Mayfield	Characteristics of early adopters and their followers of rooftop solar, electric vehicles, and heat pumps
4:00-5:30 Sustainability and Resilience-3a (Yangming Shi)	CRC2024-D-23-00194	Gabriel Castelblanco; John Salazar; Jose Guevara	NETWORK STRUCTURES AND PROJECT COMPLEXITY IN ENVIRONMENTAL IMPACT ASSESSMENT OUTCOMES
	CRC2024-D-23-00136	Paula Lopez Alvarez de Neyra, M.Sc.; Amelia Celoza	Deconstruction Information Model-Based Material Passports for promoting Circular Economy in the Architecture, Engineering, and Construction Industry through the use of Building Information Modeling: A literature review.
	CRC2024-D-23-00154	Biao Kuang; Ziming Liu; Yangming Shi; Jianli Chen	Characteristics and Influencing Factors of HVAC Energy Consumption in the US Residential Buildings
	CRC2024-D-23-00181	Abigail Murray, Ph.D.	Disproportionate impacts of stormwater infrastructure failures on unhoused communities: A literature review
	CRC2024-D-23-00288	Mohsen Mohammadi; Rayan H. Assaad; Ghiwa Assaf	Modeling the Ripple Effects of Flooding Events: Determining Critical Dependencies Using Association Rule Analysis
Friday (3/22)			
9:30-10:30 Sustainability and Resilience-4a (Yohan Min)	CRC2024-D-23-00018	Radwa Eissa; Islam El-adaway	Circular Economy Strategies for Decarbonization of the Built Environment Value Chain Scope 3 Emissions: A Network Analysis
	CRC2024-D-23-00213	Suman Paneru, MS	An Exploratory Investigation of Social Vulnerability from the Building Resilience Perspective
	CRC2024-D-23-00208	Sai Akhila Boddi Reddy, Ph.D.; Ingrid Arocho	Development of an Assessment Tool to Measure the Preparedness of Construction Firms for Upcoming Disasters
	CRC2024-D-23-00286	Mohsen Mohammadi; Rayan H. Assaad	Integrating Benefit-Cost Analysis and Monte Carlo Simulation to Prioritize Flood Mitigation Projects and Model Flood-Related Uncertainties
11:00-12:00 Sustainability and Resilience-5a (Yohan Min)	CRC2024-D-23-00221	Matthew Wiggins, Hyun Woo Lee, and	Concurrent Modeling of Embodied Carbon and Construction Costs For Mass Timber Construction
	CRC2024-D-23-00128	Ze Hua, M.S.; Elif Deniz Oguz Erkal	Exploring the Landscape: Environmental, Social, and Governance (ESG) in the Construction Industry
	CRC2024-D-23-00231	Parasar Gosain; Lu Zhang	Integrating Stakeholder Value Dynamics with Resilience Evaluation for Housing
	CRC2024-D-23-00233	Sandeep Langar; Shreya Kaduskar	Resilient Materials and Technologies for A Single-Family Home: A Review
1:30-2:30 Sustainability and Resilience-6 (Vineeth Dharmapalan)	CRC2024-D-23-00268	Xiyu Pan; Neda Mohammadi; John E. Taylor	River Flood Prediction based on Physics-informed Long Short-Term Memory Model
	CRC2024-D-23-00273	Muhammad Ali Moriyani; Chau Le; Tuyen Le	DEVELOPING A CONCEPTUAL LIFE-CYCLE FRAMEWORK FOR ADVANCING EQUITY IN LOCAL CAPITAL IMPROVEMENT PLANNING
	CRC2024-D-23-00202	Ehsan Mousavi, Ph.D.; Mohammad Saleh Nikoopayan Tak	History and Evolution of Ventilation in Cleanroom Environments: A Network Analysis Approach
	CRC2024-D-23-00283	Ghiwa Assaf; Rayan H. Assaad	A Novel Approach for Classifying the Management Priority of Flooding Events using Clustering Algorithms and Geospatial Analysis
2:45-3:45 Sustainability and Resilience-7 (Vineeth Dharmapalan)	CRC2024-D-23-00229	Hang Ren; Lu Zhang; Travis Whetsell; N. Emel Ganapati; Parasar Gosain	An Analysis of the Axiological Antecedents of Inter-Organizational Collaboration in Resilience Planning using Exponential Random Graph Models
	CRC2024-D-23-00002	Vandana Chithra Padmanabhan, M.Tech	Quantifying the thermal comfort improvement in a redevelopment project in comparison to semi-permanent homes in a densely populated slum
	CRC2024-D-23-00301	Shafayet Ahmed; Vineeth Dharmapalan; Ziyu Jin	A Subject Review on the Use of Mass Timber in the US Construction Industry
	CRC2024-D-23-00308	In Bae Chung; Carlos H. Caldas	A Literature Review of Carbon Emission Monitoring Practices in Construction Projects
Saturday (3/23)			
8:45-9:45 Sustainability and Resilience-8 Tarek Salama)	CRC2024-D-23-00285	Ghiwa Assaf; Rayan H. Assaad	Assessing The Vulnerability of Communities to Heat Waves: Developing a Heat Vulnerability Index
	CRC2024-D-23-00317	Sorena Vosoughkhosravi; Amirhosein Jafari	Creating a Large-Scale National Residential Building Energy Dataset using a Two-Stage Machine Learning Approach
	CRC2024-D-23-00330	Shiqi Ding, Ph.D. Student; Chengyu Tang; Da Li	Assessing Energy Performance and Thermal Satisfaction of Flexible Space Usage in Office Buildings
	CRC2024-D-23-00346	Lynn Shehab and Farook Hamzeh	An Experimental Framework to Measure Dynamic Thermal Resilience of Wall Panels under Extreme Weather Conditions
10:00-11:00 Sustainability and Resilience-9 (Tarek Salama)	CRC2024-D-23-00357	Nathalie Thelemaque; Jessica Kaminsky	DESCRIBING TYPES OF AEC FIRMS WITH CLIMATE PLEDGES
	CRC2024-D-23-00373	Claudia Valeria Calle Müller; Mohamed ElZomor	Origami Housing: A Post-Disaster Temporary Emergency Housing Solution
	CRC2024-D-23-00374	Aman Tripathi, Shubhang Gaur, Mina Mahdaviparsa, Deep Doshi, Srujan Kothakapu, and Soowon Chang	Pattern Analysis of LEED v4 Rating System
	CRC2024-D-23-00386	Yijin Zhao; Bharadwaj R. K. Mantha; Da Li	Real-time Building and Comfort Data Collection Using Mobile Robots
11:15-12:15 Sustainability and Resilience-10 (Tarek Salama)	CRC2024-D-23-00390	Rubaya Rahat, BSc; Mohamed ElZomor	Investigating Trends and Influential Factors for Sustainability Ratings In Envision-Certified Infrastructure Projects
	CRC2024-D-23-00394	Sunil Dhakal; Lu Zhang	Equity-Integrated Infrastructure Resilience Analysis: Case Studies of Florida Communities
	CRC2024-D-23-00395	Mohamadali Morshedi; Arkaprabha Bhattacharyya; Makarand Hastak	EXPLORING SOCIO-DEMOGRAPHIC INEQUALITIES IN POST-DISASTER COMMUNITY WELL-BEING: CASE STUDY OF HURRICANE HARVEY
	CRC2024-D-23-00292	Yasser Jezzini; Rayan H. Assaad	Modeling Flood Vulnerabilities and Estimating Potential Economic and Social Losses: Assessing the Level of Community Flood Readiness and Preparedness in Newark, NJ

	Track Session (Moderator)	Room 315		
		Manuscript	Authors	Title
Thursday (3/21)				
1:00-2:00	Sustainability and Resilience (Lauryn Spearing)	CRC2024-D-23-00396	Mohamadali Morshedi; Arkaprabha Bhattacharyya; Makarand Hastak	Prioritizing Capacity Building Strategies to Ensure Robustness and Faster Recovery of Cellular Networks from Hurricanes
		CRC2024-D-23-00545	Patricia Guillante; Kristen Cetin	Potential Factors Influencing Student Rental Housing Participation in Demand-Side Management Strategies
		CRC2024-D-23-00587	Enric Barkokebas; Regina Dias Barkokebas, Ph.D.; Mohamed Al-Hussein	Systematic Review of Material Selection for Building Envelopes Based on Multi-criterion Decision-making
		CRC2024-D-23-00455	Toby Nelson; Cristina Poleacovschi; Kaoru Ikuma; Ivis Garcia; Chris Rehmann; Carl F Weems	Household Water Insecurity and Depression Symptoms Among Individuals Exposed to Hurricanes Maria and Fiona
2:30-3:30	Sustainability and Resilience (Lauryn Spearing)	CRC2024-D-23-00466	Sundeep Inti, Ph.D., P.E., LEED AP; Niharika Dayyala	Lightweight Cellular Concrete (LCC) for Stormwater Management in Parking Lots: A Design Optimization Approach
		CRC2024-D-23-00470	Christopher Nicholas Bennett; Zia Ud Din, Ph.D.; Ahmed Senouci; Rosalind Anne Wyatt	Adoption of Circular Economy Practices in the Built Environment- A Survey of US Construction Industry Stakeholders
		CRC2024-D-23-00504	Michael Ammoury; Baris Salman	The Use of Advanced Solutions Towards COVID-19 Recovery at Airports in Eastern U.S.A.
		CRC2024-D-23-00514	Brad Wells; Clifton Farnsworth; Andrew South; Evan Bingham; James Smith	EVALUATING THE IMPACTS OF HURRICANE MARIA ON RESIDENTIAL CONSTRUCTION IN PUERTO RICO
4:00-5:30	Sustainability and Resilience (Juyeong Choi)	CRC2024-D-23-00617	Maral Nazemi; Ahmad Alshami; Qian Zhang; Juyeong Choi	Reuse and recycling feasibility assessment for bridge components: a case study of a bridge investigation in Florida
		CRC2024-D-23-00405	Lufan Wang; Md Ashiqur Rahman; Runhe Zhu, Ph.D.	Spatiotemporal Insights into Online Public Responses under Disasters in Developed and Underdeveloped Countries
		CRC2024-D-23-00550	Asma A Sharafeddin, Ph.D.; Ingrid State Arocho	Potential Leading Sustainability Performance Indicators for Sustainable Low-Income Housing
		CRC2024-D-23-00569	Don Miller; Yewande Sonayon Abraham, Ph.D.	COVID-19 IMPACTS ON CONSTRUCTION PROJECT EXECUTION: CASE STUDIES OF DATA CENTER PROJECTS
		CRC2024-D-23-00573	Elnaz Safapour	A Bibliometrics-Based Visualization Analysis of Sustainable Transportation Infrastructure Research
Friday (3/22)				
9:30-10:30	Sustainability and Resilience (Haniye Safarpour)	CRC2024-D-23-00485	Amanda Quarshie; Cristina Poleacovschi; Kristen Cetin	An Assessment of the Social Determinants of Participation in Energy Efficiency Programs in Alaska Native Homes
		CRC2024-D-23-00454	Smitha JS, ME	A Life Cycle Analysis Based Framework to Analyze Various Circular Economy Strategies in Buildings
		CRC2024-D-23-00591	Valeria Vecchio; Beda Barkokebas; Regina Dias Barkokebas, Ph.D.; Mohamed Al-Hussein	A Systematic and Bibliometric Review of Greenhouse Gas Emissions in the Construction Phase of Residential Buildings
		CRC2024-D-23-00527	Mohsen Goodarzi, Ph.D; Alireza Shayesteh	DOES LEED BD+C FOR NEW CONSTRUCTION PROVIDE A REALISTIC AND PRACTICAL SUSTAINABILITY EVALUATION SYSTEM?
11:00-12:00	Sustainability and Resilience (Haniye Safarpour)	CRC2024-D-23-00642	S. Yasaman Ahmadi; Jennifer Lather	Comparing Differences of Community Resilience and Rurality in the USA for Counties Prone to Riverine Flooding
		CRC2024-D-23-00646	Vaishnavi Jagalur Ramachandra; Naila Mahaveen; Siddharth Banerjee, Ph.D.; Pedram Ghannad	ARTIFICIAL INTELLIGENCE ENABLING SUSTAINABLE CONSTRUCTION: A SYSTEMATIC REVIEW
		CRC2024-D-23-00665	Behzad Rouhanizadeh	A GIS-Based Social Vulnerability Assessment of Communities in Coastal Areas, Exposed to Extreme Flood Events: A Case Study of New Orleans Urban Area
		CRC2024-D-23-00667	Mohamed AbdelRaheem; Heba Gaber	Framework of the Assessment of the Financial Feasibility of Utilizing Piezoelectric Harvesters into Roadways
1:30-2:30	Infrastructure Systems and Engineering and Materials Design (Soowon Chang)	CRC2024-D-23-00668	Marcus Nartey; Cristina Poleacovschi	Factors Leading to Tap Water Mistrust in Served Alaska Native Communities – A Case Study of a Village in the Norton Sound Region
		CRC2024-D-23-00006	Haniye Safarpour; Deborah Carroll; Lauryn Spearing	Spatial and Demographic Trends in Lead Levels: The Case of Chicago's Water System
		CRC2024-D-23-00049	Ashtarout Ammar, Ph.D.; Gabriel Dadi; Hala Nassereddine	State Departments of Transportation Efforts Toward Optimizing The Management of Ancillary Asset Data: State of Practice and Future Recommendations
		CRC2024-D-23-00054	Junyi Duan; Chengcheng Tao, Ph.D.; Ying Huang	Finite Element Analysis of Structural Lining Materials for Pipeline Rehabilitation
2:45-3:45	Infrastructure Systems and Engineering and Materials Design (Soowon Chang)	CRC2024-D-23-00244	Amal Bakchan, Ph.D.; Kevin D. White	Identifying Socio-technical Challenges to Decentralized Wastewater Infrastructure Management in the Rural Alabama Black Belt
		CRC2024-D-23-00307	Pooya Darghiasi; Mohsen Shahandashti	Enhancing Winter Maintenance Decision Making through Deep Learning-Based Road Surface Temperature Estimation
		CRC2024-D-23-00326	Ahmed Al-Bayati; Louis Panzer; Ricardo Eiris	Third-Party Damages to Underground Utility: The Critical Need for Root Cause Analysis
		CRC2024-D-23-00341	Faisal Quibria Chowdhury; Yoojung Yoon	Case Study: Effect of the Condition Data of Automated Pavement Surveys on Pavement Performance Indicators
Saturday (3/23)				
8:45-9:45	Infrastructure Systems and Engineering and Materials Design (Roy Sturgill)	CRC2024-D-23-00050	Ashtarout Ammar, Ph.D.; Makram Bou Hatoum; Hala Nassereddine; Gabriel Dadi	Introducing CHAMFiT: A Decision-Making Tool for Optimizing the Use of Wireless and Sensing Technologies in Highway Projects
		CRC2024-D-23-00087	Jieyi Bao, M.D.; Xiaoqiang Hu; Yi Jiang; Shuo Li; Tommy Nantung	CREATION OF TRUCK WEIGHT ROAD GROUPS FOR PAVEMENT DESIGN
		CRC2024-D-23-00360	Mina Zamanian; Mohsen Shahandashti	Empirical Study of the Correlation Between Geoelectrical and Soil-Index Properties of Clayey Soils
		CRC2024-D-23-00361	Shiva Arabi; David Grau	Automated Underground Water Leakage Detection with Machine Learning Analysis of Satellite Imagery
10:00-11:00	Infrastructure Systems and Engineering and Materials Design (Roy Sturgill)	CRC2024-D-23-00380	Frederick Chung; Minsoo Baek; Yejee Paik; Baabak Ashuri	Empirical Analysis of Pavement Condition Transition Probabilities
		CRC2024-D-23-00416	Felipe Araya, Ph.D.; Nivaldo Calabran	EXPLORATION OF HEALTHCARE INFRASTRUCTURE INTERDEPENDENCIES DUE TO NATURAL DISASTERS
		CRC2024-D-23-00446	Mahdi Ghafoori; Moatassem Abdallah, PhD; Mehmet Ozbek	Modeling and Predicting Deterioration of Concrete Bridge Elements Using Machine Learning
		CRC2024-D-23-00465	Jeremiah Adebiyi; Jim Anspach; Roy Sturgill; Philip Meis	Evaluating Utility Data Reliability: A Comparison of One Call and Subsurface Utility Engineering (SUE) Records
11:15-12:15	Infrastructure Systems and Engineering and Materials Design (Roy Sturgill)	CRC2024-D-23-00480	Soowon Chang and Heung Jin Oh	Systematic Review of Social Equity for Installing Public Electric Vehicle Charging Stations (EVCS)
		CRC2024-D-23-00507	Lila Madariaga; Clifton Farnsworth; Andrew South	Deciding Infrastructure Reconstruction Priorities After Disasters: A Literature Review
		CRC2024-D-23-00603	John Montagu; Simone Curtis; Constance Crozier; Cristina Torres-Machi; Kyri Baker	Trends in Equitable Electric Vehicle Adoption and Impacts on Pavement Condition and Electric Power Infrastructure
		CRC2024-D-23-00686	Anh D Chau, Ph.D.; Long D Nguyen	Development of an Integrated Web-based Application for Pavement Design and Life Cycle Cost Analysis

	Track Session (Moderator)	Manuscript	Authors	Room 314 Title
Thursday (3/21)				
1:00-2:00	Health and Safety (Gabe Dadi)	CRC2024-D-23-00001	Abdulaziz Alotaibi; John Gambatese	IMPACTS OF WORK SETTING AND TASK COMPLEXITY ON MENTAL WORKLOAD AND SAFETY: AN EXPERIMENTAL STUDY
		CRC2024-D-23-00061	Adedeji Olushola Afolabi, Ph.D.; Oluwalobamise Deborah Orafidiya	DEVELOPMENT OF A WEB-BASED WEAR-FIT SYSTEM FOR CONSTRUCTION WORKERS' PPEs.
		CRC2024-D-23-00012	Ziyu Jin, Ph.D.	Building and Construction Safety Design for Emergency Evacuation: A Review of Evacuation Environment and Current Technologies
		CRC2024-D-23-00562	Behzad Esmaeili, Ph.D.,	Situation Awareness Study in the Construction Industry: A Systematic Review
2:30-3:30	Health and Safety (Gabe Dadi)	CRC2024-D-23-00688	Farshid Taherpour Sisakht, Studying Ph.D; Gabriel Dadi; Parisa Kheiri; Mahsan Keshavarz	Improving Hazard Recognition in the construction industry: A Systematic Review of a Building Information Modelling Approach
		CRC2024-D-23-00009	Ahmed Al-Bayati	Human and Workplace Factors Contributing to PPE Non-Compliance: A Critical Assessment
		CRC2024-D-23-00505	Abdullahi Alabi Ibrahim, Ph.D.	ASSESSING THE EFFECTIVENESS OF EXOSKELETONS IN REDUCING MUSCULOSKELETAL RISK IN CONSTRUCTION: A PILOT STUDY
		CRC2024-D-23-00079	Ali Hassandokht Mashhadi, M.Sc; Abbas Rashidi; Nikola Marković	Probabilistic Versus Non-probabilistic Machine Learning Approaches for Estimating the Severity of Crashes in Construction Work zones
4:00-5:30	Health and Safety (Chau Le)	CRC2024-D-23-00090	Josiane Isingizwe; Ricardo Eiris; Ahmed Al-Bayati	Immersive Storytelling Safety Training to Enhance Trainee Engagement: Pilot Study for Fall Hazards in the Residential Construction Sector
		CRC2024-D-23-00107	Kaushik Bhattacharjee, Ph.D. (Pursuing); Nikhil Bugalia	Do projects of different sizes face differences in safety-critical complexities? Empirical evidence from and implication for the construction sector of India
		CRC2024-D-23-00126	Tejal Mulay; Mohamed Khalafalla, Ph.D.; Shonda Bernadin	Acoustic Emotion Recognition for Improved Safety in the Construction Industry
		CRC2024-D-23-00143	Kehinde Abdulsalam Elelu, Ph.D; Tuyen Le; Chau Le	Multiple-Channel Audio Construction Equipment Dataset Preparation for Sound Detection and Localization to Prevent Collision Hazard
		CRC2024-D-23-00173	Namgyun Kim; Changbum Ryan Ahn; JungHo Jeon	Detecting Activities Exposing Construction Workers to the Risk of Developing Carpal Tunnel Syndrome
Friday (3/22)				
9:30-10:30	Health and Safety (Deniz Besiktepe)	CRC2024-D-23-00535	Shiva Pooladvand; Sogand Hasanzadeh, Ph.D.	Effects of Heat Stress on Workers' Physical Fatigue and Attentiveness: Multimodal Roofing XR Simulation
		CRC2024-D-23-00216	Solomon Ajasa; Raissa Marchiori; Siyuan Song	THE APPLICATION OF BIM-BASED TECHNOLOGY TOWARD FALL HAZARD MITIGATION IN CONSTRUCTION
		CRC2024-D-23-00152	Wei-Hsuen Lee; John Gambatese; Matthew Hallowell; Chukwuma Nnaji	Impact of Last-Minute Changes on Construction Safety
		CRC2024-D-23-00021	Bahaa Chammout; Muaz Ahmed; Islam El-adaway	Exploring the Root Factors Impacting Work Zone Accidents: A Mixed-Methods Study
11:00-12:00	Health and Safety (Deniz Besiktepe)	CRC2024-D-23-00575	Behzad Esmaeili, Ph.D.,	Support Vector Machine Analysis of Construction Workers' Automatic Behavior and Visual Attention
		CRC2024-D-23-00232	K. Joseph Shrestha, Ph.D.; Jeff Canon; Ahmed Adelaty; Krishna Kisi	COMMON BUILDING CONSTRUCTION CODE VIOLATIONS: CASE STUDY
		CRC2024-D-23-00236	Arnaldo Bayona; Nathalie Moyen; Matthew Ryan Hallowell; Siddharth Bhandari	Exploring the hypothesized mechanisms by which serious injuries and fatalities impact business performance
		CRC2024-D-23-00241	Shayan Shayesteh; Houtan Jebelli	EVALUATING THE FEASIBILITY OF PERSONALIZED HEALTH STATUS FEEDBACK TO ENHANCE WORKER SAFETY AND WELL-BEING AT CONSTRUCTION JOB SITES
1:30-2:30	Health and Safety (Sogand Hasanzadeh)	CRC2024-D-23-00457	Nihar Gonsalves; Abiola Akanmu; Alireza Shojaei; Philip Agee; Xinghua Gao	A Conceptual Framework for Implementing Passive Wearable Robots in the Construction Industry
		CRC2024-D-23-00264	Roya Raeisinafchi; Siddharth Bhandari; Logan Perry; Alex Albert	Construction Safety Training: Engaging Techniques and Technology Adoption Perspectives
		CRC2024-D-23-00059	Ahmed Al-Bayati	Assessing Usability of the Construction Safety Culture and Climate Framework: A Crucial Method for Advancing Construction Safety
		CRC2024-D-23-00309	JuHyeong Ryu, Ph.D.; Carl Haas; Eihab Abdel-Rahman	Postural Assessment Criteria for Manual Material Handling in Masonry Work
2:45-3:45	Health and Safety (Sogand Hasanzadeh)	CRC2024-D-23-00246	Hongtao Dang; Sathy Rajendran; John Gambatese; Mandi Kime	Training Development of Infectious Diseases for Construction Workers
		CRC2024-D-23-00321	Jie Li; Xiaowei Luo	Towards an EEG-based Approach for Detecting Falls from Height Hazards using Construction Workers' Physiological Signals
		CRC2024-D-23-00339	Moein Younesi; Youjin Jang; Kwonsik Song	Physiological Signal Analysis for Awkward Working Postures of Construction Workers using Wearable Biosensor
		CRC2024-D-23-00525	Kyeongsuk (Sean) Lee; Sogand Hasanzadeh, Ph.D.	Examine the Impact of Aging on Workers' Hazard Identification Ability in Dynamic Construction Environments
Saturday (3/23)				
8:45-9:45	Health and Safety (Chris Harper)	CRC2024-D-23-00251	Qichang Dai; John Gambatese; Abdulaziz Alotaibi	RELATIONSHIP BETWEEN LEAN CONSTRUCTION PRACTICES AND CONSTRUCTION INDUSTRIALIZATION METHODS
		CRC2024-D-23-00364	Srijeet Halder; Saeid Alimoradi; Kereshmeh Afsari	A Computer Vision Approach To Assessing Work-Related Musculoskeletal Disorder (WMSD) Risk In Construction Workers
		CRC2024-D-23-00368	S M Jamil Uddin, MSc; Nafisa Tabassum; Anto Ovid; Abdullah Alsharef; Alex Albert	Measuring Mental Fatigue in Construction: State of the Science and Future Opportunities
		CRC2024-D-23-00223	Evan C Stoddard, B.S. Civil Engineering; Siddharth Bhandari; Fred Sherratt	What Mental Health Stressors do Hispanic Construction Workers Actually Care About?
10:00-11:00	Health and Safety (Chris Harper)	CRC2024-D-23-00426	Gunwoo Yong; Meiyin Liu; SangHyun Lee	Automated Captioning for Ergonomic Problem and Solution Identification in Construction Using a Vision-Language Model and Caption Augmentation
		CRC2024-D-23-00440	Yogesh Gautam; Houtan Jebelli	Autoencoder-based Motion Artifact Reduction in Photoplethysmography (PPG) Signals Acquired from Wearable Sensors During Construction Tasks
		CRC2024-D-23-00449	Pei-hsin Lin; Aritra Pal; Jacob J. Lin; Shang-Hsien Hsieh	Individual Component Detection of a Scaffolding Assembly for Vision-based Safety Check
		CRC2024-D-23-00453	Nihar Gonsalves; Abiola Akanmu; Philip Agee; Alireza Shojaei; Xinghua Gao	Construction Workers' Behavioral Intention Towards a Passive Back-Support Exoskeleton: Application and Extension of UTAUT Model
11:15-12:15	Health and Safety (Chris Harper)	CRC2024-D-23-00567	Behzad Esmaeili, Ph.D.,	Determining the Effectiveness of Construction Safety Signs: An Eye-tracking Study
		CRC2024-D-23-00473	Sena Assaf; Zeyu Maou; Samaneh Momenifar; Ahmed Hammad	Evaluating Machine Learning and AHP Tools for the Pre-qualification of Construction Contractors based on Occupational Health and Safety Criteria
		CRC2024-D-23-00611	Mostafa Namian, Ph.D.; Chukwuma Nnaji; Sharareh Kermanshachi	Investigating the Impact of Smoking on Fatigue Level Among Construction Workers
		CRC2024-D-23-00158	Peiyi Lyu; Siyuan Song; Sepehr Khorshid	Exploring the Influence of Extreme Weather on Construction Worker Safety

	Track Session (Moderator)	Room 310		
		Manuscript	Authors	Title
Thursday (3/21)				
1:00-2:00	Health and Safety (Shiva Pooladvand)	CRC2024-D-23-00598	Akinwale SAMUEL Samuel Okunola, PhD; Abiola Akanmu	Detection of Cognitive Loads during Exoskeleton-Use for Construction Flooring Work
		CRC2024-D-23-00533	Yanfang Luo, JoonOh Seo, Sogand Hasanzadeh, and Ali Abbas	Exploring the Schema of Attention and Search Strategy in Different Levels of Situation Awareness under Fall Hazards Conditions
		CRC2024-D-23-00630	Ibukun Awolusi, Ph.D.; Chukwuma Nnaji	Developing a Conceptual Model for Evaluating Construction Workers' Adaptation to the Use of Wearable Sensing Devices
		CRC2024-D-23-00538	Mostafa Namian, Ph.D.; Tianjiao Zhao; Michael Behm	Safety Nudge in Construction: Improving Safety Decision-Making Among Construction Workers
2:30-3:30	Health and Safety (Shiva Pooladvand)	CRC2024-D-23-00674	Hani Alzraiee; Harrison Fugate	Factors Preventing Construction Management from Adopting Wearable Sensing Devices in Construction Safety
		CRC2024-D-23-00160	Raissa Seichi Marchiori; Siyuan Song; Solomon Ajasa; Peiyi Lyu	ASSESSING USABILITY, FREQUENCY, AND EFFICIENCY OF FALL HAZARD PREVENTION DEVICES IN CONSTRUCTION: DEVELOPMENT OF A COMPREHENSIVE QUESTIONNAIRE FOR EVALUATION
		CRC2024-D-23-00260	Qinghao Zeng, Ph.D.; Botao Li; Pardis Pishdad-Bozorgi	ANALYZING THE RELATIONSHIP BETWEEN INDOOR ENVIRONMENTAL QUALITY AND OCCUPANTS' BEHAVIORS AND HEALTH FOR INDUSTRIAL BUILDINGS: A SYSTEMATIC LITERATURE REVIEW
		CRC2024-D-23-00369	Mohamed Marzouk; Toka Taha; Ahmed Abdelaty	Assessing Safety Training in the Egyptian Construction Industry: A Comparative Analysis
4:00-5:30	Health and Safety (Kristen Parrish)	CRC2024-D-23-00635	Janet Mayowa Nwaogu; Albert P.C. Chan; Jackie Y. Yang	JOB CRAFTING AND JOB SCULPTING INTERVENTION FOR BALANCING WORK-LIFE AND IMPROVING MENTAL HEALTH AMONG CONSTRUCTION SUPERVISORS
		CRC2024-D-23-00490	Novi Bramono, Heather Burpee, Sofia Dermisi, Yohan Min, and Hyun Woo Lee	Benchmarking Healthy Building Requirements in Mitigating Airborne Transmission Diseases such as COVID-19: Identifying the Gaps between Current Codes and Building Rating Tools
		CRC2024-D-23-00601	Akinwale SAMUEL Samuel Okunola, PhD; Abiola Akanmu	Facilitators and Barriers to the Adoption of Active Back-Support Exoskeletons in the Construction Industry
		CRC2024-D-23-00347	Lynn Shehab; Elyar Pourrahimian; Farook Hamzeh	Bridging Construction Workers' Minds and Bodies: A Conceptual Approach
		CRC2024-D-23-00071	Jayson Francois; Mohamed Khalafalla, Ph.D.; Doreen Kobelo	Preventing Drowsy Driving Accidents in Construction Industry Using Computer Vision and Convolutional Neural Networks
Friday (3/22)				
9:30-10:30	Health and Safety (Mohamed S. Eid)	CRC2024-D-23-00291	Xi Hu; Rayan H. Assaad	Intelligent Inspection and Warning Robotic System for Onsite Construction Safety Monitoring Using Computer Vision and Unmanned Ground Vehicle
		CRC2024-D-23-00558	Behzad Esmaeili, Ph.D.,	Application of Paper-Based Wearable Electronics (PBWE) for Objective Assessment of Fatigue in Lower Back of Construction Workers
		CRC2024-D-23-00687	Farshid Taherpour Sisakht, Studying Ph.D; Gabriel Dadi; Mahsan Keshavarz; Parisa Kheiri	Assessing the Potential of Machine Learning in Construction Safety: A Systematic Review
		CRC2024-D-23-00595	Mostafa Namian, Ph.D.; Daniel Godwin; Mohammadsoroush Tafazzoli; Ahmed Al-Bayati	The Impact of Education on Fatigue Among Construction Workers: A Longitudinal Study
11:00-12:00	Contracting, Project Delivery, and Legal Issues (Mohamed S. Eid)	CRC2024-D-23-00020	Islam El-adaway; Ramy Khalef	Analyzing the Impact of DB Versus DBB on Cost Performance in Airport Development: A Data-Driven Approach
		CRC2024-D-23-00008	Saurav Shrestha; Yongwei Shan; Paul M. Goodrum	Identify Best Practices of Project Bundling for Highway Construction Projects
		CRC2024-D-23-00510	Tolulope Ibilola Ogundare	CURRENT PRACTICES IN THE DEVELOPMENT OF GUARANTEED MAXIMUM PRICE (GMP) CONTRACTS
1:30-2:30	Contracting, Project Delivery, and Legal Issues (Hyosoo Moon)	CRC2024-D-23-00047	Abdolmajid Erfani; Kunqi Zhang; Qingbin Cui	A Stakeholder-Centered Approach to Measure the Market Resiliency in Transportation Projects using Social Network Analysis
		CRC2024-D-23-00583	Wedad Baker Abu Adi, Ph.D.; Jennifer Shane; Bryan W Franz; Allison M Breunig; Susan M Bogus; Dominica Bennett; Daniel M Hall; Marcella M Bonanomi	Exploring the Design-Integration Manager's Role on Design-Build Projects: A Comparison of the Building Construction, Highway, and Industrial Market Sectors
		CRC2024-D-23-00247	Timothy Carl Becker, Ph.D.; Jennifer S Shane; Anthony Lamanna; Mark Van Buren; James Scheer	Results of a Groundbreaking Integrated Delivery Project: Multi-stakeholder Assessments and Lessons Learned from the Waaban Crossing Bridge
2:45-3:45	Contracting, Project Delivery, and Legal Issues (Hyosoo Moon)	CRC2024-D-23-00153	Phuong Nguyen, Ph.D.; Daniel Tran	Development of A Practical Project Delivery Selection Tool for Airport Capital Projects
		CRC2024-D-23-00169	Sepehr Khorshid; Siyuan Song; Halee Hudson	The Future of Housing: Modular Construction And its Potential for Affordable living in the US: A Case Study
		CRC2024-D-23-00585	Wedad Baker Abu Adi, Ph.D.; Jennifer Shane	A Comprehensive Review of Integration Management Components in Construction Management
Saturday (3/23)				
8:45-9:45	Contracting, Project Delivery, and Legal Issues (Tim Becker)	CRC2024-D-23-00442	Andria De La Cruz; Jeyoung Woo, Ph.D.; Ghada M. Gad	Public/Private Works Contracting: Factors Influencing Contractor Participation in Southern California
		CRC2024-D-23-00500	Jeongyoon Oh; Ali Touran; Daniel D'Angelo; Baabak Ashuri	A comprehensive analysis of change orders based on project progress in design-build highway construction.
		CRC2024-D-23-00022	Bahaa Chammout; Islam El-adaway	A Contractual Approach to Resolving Disputes Arising from Failure to Achieve Green Certification
10:00-11:00	Contracting, Project Delivery, and Legal Issues (Tim Becker)	CRC2024-D-23-00073	Mohamed Khalafalla, Ph.D.; Jorge Rueda-Benavides	Value for Money Based Project Selection Framework using Multi-Attribute Utility Theory
		CRC2024-D-23-00673	Won Kyoung Seo, Ph.D.; Youngcheol Kang	Auto-summarization for the Texts of Construction Dispute Precedents
		CRC2024-D-23-00042	Yomna Mansour; Mohamed Eid, Ph.D; Hesham Bassioni	DIVISION OF COST DEVIATIONS IN INTEGRATED PROJECT DELIVERY SYSTEMS USING COOPERATIVE GAME THEORY
11:15-12:15	Contracting, Project Delivery, and Legal Issues (Tim Becker)	CRC2024-D-23-00335	Hala Sanboskani; Dean Steven Papajohn; Mounir El Asmar	Implementation of Post-Award Contract Administration Tools in D-B and CM-GC Highway Projects: The State of Practice in the Design Phase
		CRC2024-D-23-00131	Phuong Nguyen, Ph.D.; Daniel Tran	Implementing Bayesian Networks in Delivery Selection for Highway Construction Projects
		CRC2024-D-23-00566	Fahad K. Alqahtani, PhD; Abdullah Alsharef; Abdullah Bin dakhel; Hamad Alshaya; Ahmed Gouda Mohamed	Implementation and Challenges of Utilizing the Smart Contracts Automation Tool in the Construction Industry

Track Session (Moderator)	Manuscript	Authors	Room 309 Title
Thursday (3/21)			
1:00-2:00 — Computer Applications, Information Modeling, and Simulation (Ossama Hosny)	CRC2024-D-23-00398	OSAMA AL-MAABREH, M.Sc.; YONG-CHEOL LEE	Digitizing Disaster Resilience Requirements for BIM-based Resilience Validation
	CRC2024-D-23-00472	Mohamed Taha Ramadan, MSc.; Ossama Hossny; Khaled Nassar	Support Vector Autoregression and Neural Network for prediction of Construction stock prices in Egypt
	CRC2024-D-23-00520	Hussein Al Jebaei, M.Eng; Ashrant Aryal, Ph.D.	Black-Box model for predicting HVAC energy consumption and PCM State with different Melting Temperatures of PCM for small office buildings
2:30-3:30 — Computer Applications, Information Modeling, and Simulation (Ossama Hosny)	CRC2024-D-23-00486	Ziming Liu; Tolulope Sanni; Jun Liu; Yangming Shi	A MULTIMODALITY VR TRAINING SYSTEM FOR FUTURE ELECTRICAL VEHICLE EMERGENCY RESPONSES
	CRC2024-D-23-00607	Sogand Hasanzadeh, Ph.D.	A Novel Digital Twin Architecture for 3D Concrete Printing in the AEC Industry
	CRC2024-D-23-00498	Anisha Deria; Pedram Ghannad; Yong-Cheol Lee	Deep Reinforcement Learning-based Optimization for Crew Allocation in Modular Building Prefabrication
4:00-5:30 — Computer Applications, Information Modeling, and Simulation (Cristina Torres-Machi)	CRC2024-D-23-00293	Yasser Jezzini; Rayan H. Assaad; Islam El-adaway; Mohamad Abdul Nabi	An Accurate-Pricing-Estimate Game-Theoretic Model for Determining Price Escalations in Construction Projects during Economic Uncertainties
	CRC2024-D-23-00487	Taewoo Ko; Rabin Shrestha; Jeehee Lee	Pro-active Allocation of Project Requirements through Natural Language Processing (NLP) and Project Information System Integration
	CRC2024-D-23-00627	Yueyan Gu; Farrokh Jazizadeh	Digital Twin-Assisted Anomaly Detection for Smarter Built Environment Management: A Literature Review
Friday (3/22)			
9:30-10:30 — Computer Applications, Information Modeling, and Simulation (Tim Taylor)	CRC2024-D-23-00354	Fam Saeed; Kareem Mostafa; Mostafa Soliman; Tarek Hegazy	Agent-based Simulation of Multi-Crew Allocation to Scattered Repetitive Projects
	CRC2024-D-23-00370	Ruqayah Alsayed Ebrahim; Yitong Li; Wenying Ji	Evaluating Road Utilization During Hurricane Evacuation: A Case Study of Hurricane Ian
	CRC2024-D-23-00384	Diego Peñaranda; Jose Guevara; Sergio Cabrales	Fourier series for seasonal traffic forecasting: an application to a real toll road concession in Colombia
11:00-12:00 — Computer Applications, Information Modeling, and Simulation (Tim Taylor)	CRC2024-D-23-00399	Moeid Shariatfar; Yong-Cheol Lee	Development of Urban-Level Infrastructure Information Delivery Manuals Using Knowledge Modularization for Enhanced Smart City Data Exchanges
	CRC2024-D-23-00435	Yuhan Jiang, Ph.D.	Using Weakly-Supervised Semantic Segmentation for Post-Disaster Scene Understanding
	CRC2024-D-23-00437	Mehdi Torbat Esfahani; Ibukun Awolusi, Ph.D.; Chukwuma Nnaji	Using Virtual Reality to Enhance Construction Workers' Response to Alerts from Wearable Sensing Devices: A Review
1:30-2:30 — Construction Scheduling, Estimating, Economics, Quality and Value	CRC2024-D-23-00031	Minerva Bonilla, M.S.; William Rasdorf	Construction Inhibitors of Alternative Intersections and Interchanges
	CRC2024-D-23-00072	Kaylyn Cardinal; Mohamed Khalafalla, Ph.D.; Jorge Rueda-Benavides	Development of a Stochastic Risk Assessment Protocol for Analyzing the Impact of Fluctuations in Crude Oil and Fuel Prices on Asphalt Prices in the State of Alabama
	CRC2024-D-23-00076	Mamdouh Mohamed; Daniel Tran	Examining Risk-based Construction Inspection Practices in Transportation Agencies
2:45-3:45 — Construction Scheduling, Estimating, Economics, Quality and Value (Maria Calahorra-Jimenez)	CRC2024-D-23-00272	Mingshu Li; Qiu Zheng; Baabak Ashuri	Quantifying the Impact of Covid-19 on Transportation Construction Industry Using Regime Switching Models
	CRC2024-D-23-00476	Mennatallah Soliman; Elkhayam Dorra; Ossama Hosny	The integration of supply chain finance in the construction industry and its influence on the Contractor's cash flow
	CRC2024-D-23-00622	Mohammad Movahedi; Seungwon Seo; Choongwan Koo; Juyeong Choi	Assessment of Estimation Methods for Demolition Waste Volume and Cost
Saturday (3/23)			
8:45-9:45 — Construction Scheduling, Estimating, Economics, Quality and Value (Jeyoung Woo)	CRC2024-D-23-00117	Huu T. Huynh; Fatemeh "Raha" Ashrafi; Mohamed S. Eid; Gunnar Lucko, Ph.D.	Concurrent Delay Analysis via Cooperative Game Theory
	CRC2024-D-23-00314	Payam Mohammadi, Ph.D. Student; Claudia Garrido Martins	Cost/Benefit Analysis Model for Implementing Virtual Reality in Construction Companies
	CRC2024-D-23-00192	Mateo Manzano-Alvarado; Laura Montalban-Domingo; Tatiana García Segura; Amalia Sanz-Benlloch; Eugenio Pellicer, Ph.D.	TIME AND COST OVERRUN IN CONSTRUCTION PROJECTS IN ECUADOR: MAIN CAUSES AND RISK FACTORS
10:00-11:00 — Construction Scheduling, Estimating, Economics, Quality and Value (Jeyoung Woo)	CRC2024-D-23-00284	Ghiwa Assaf; Rayan H. Assaad	Predicting Construction Costs Under Uncertain Market Conditions: Probabilistic Forecasting Using Autoregressive Recurrent Networks based on DeepAR
	CRC2024-D-23-00120	Yi Su; Shabtai Isaac; Gunnar Lucko, Ph.D.	Cruciality: Role of Network Topology in Schedule Resilience to Delay Propagation
	CRC2024-D-23-00371	MD Shah Jamal; Ahmed Abdelaty; Joseph Shrestha	Improving the Reliability of Adverse Weather Day Estimation in Project Planning: A Framework Utilizing Daily Work Reports
11:15-12:15 — Construction Scheduling, Estimating, Economics, Quality and Value (Jeyoung Woo)	CRC2024-D-23-00492	Jennifer Shane, Ph.D.; Andrew Gatto; Kelly Strong	A Comparison of Department of Transportation Progress Scheduling Specifications from Across the Nation
	CRC2024-D-23-00499	Yejee Paik; Baabak Ashuri	Examining Impact of COVID-19 on Unit Bid Price of Reclaimed Asphaltic Concrete Items regarding Georgia Highway Maintenance Project through Change Point Detection
	CRC2024-D-23-00544	Jeyoung Woo, Ph.D.; Ghada M. Gad; Joshua A. Paredes; Uttarayan Bagchi	Metrics to Assess the Quality Performance of Capital Projects

Track Session (Moderator)	Manuscript	Authors	Room 308 Title
Thursday (3/21)			
1:00-2:00 Construction Education, Workforce, Diversity, and Inclusion-1 (Susan Bogus)	CRC2024-D-23-00011	Vuppala Srinija; Nikhil Bugalia, PhD	Evaluation of System Dynamics-based serious games for teaching Project Management concepts in Construction
	CRC2024-D-23-00014	Zixian Zhu; Jiun-Yao Cheng; Idris Jeelani; Masoud Gheisari; Raja R. A. Issa	Virtual Onboarding: Construction Site Orientation for New Employees in a Virtual Environment
	CRC2024-D-23-00032	Olugbenro Ogunrinde	Scientometric Analysis of Literature for Emerging Technology Integrated into AEC Education Curriculum
	CRC2024-D-23-00039	Paul J HICKEY, Ph.D. (expected 5/2023); Melissa L. ROCCO; Qingbin CUI	Listening to Leaders – How AEC Women Grow Their Career Pathways
2:30-3:30 Construction Education, Workforce, Diversity, and Inclusion-2 (Susan Bogus)	CRC2024-D-23-00056	Jiun-Yao Cheng, MSc; Masoud Gheisari; Idris Jeelani	Enhancing AI Literacy of Undergraduate Students using Construction Safety Context
	CRC2024-D-23-00062	Adedeji Olushola Afolabi, Ph.D.; Oluwaseun Kasope Shaw	Examining E-learning Adoption in Construction Education in a Developing Country during the COVID-19 Pandemic
	CRC2024-D-23-00085	Bassam Ramadan; Hala Nassereddine; Tim Taylor; Paul Goodrum	The Construction Worker's Social Experience: Age and Position
	CRC2024-D-23-00336	Manideep Tummalapudi; Christofer Michael Harper, Ph.D.; Jon W Elliott	Technical Competencies for Transportation Construction Inspection Workforce Development
4:00-5:30 Construction Education, Workforce, Diversity, and Inclusion-3 (Kyeongsuk Lee)	CRC2024-D-23-00123	Yuan Sun	A Virtual Site Visit on Four-legged Robots Applications in Construction
	CRC2024-D-23-00146	Erika Judith Rivera; Mohamed ElZomor	TRANSFORMING CONSTRUCTION ENGINEERING EDUCATION THROUGH INCLUSIVENESS TRAINING, AND MANAGING EXPECTATIONS .
	CRC2024-D-23-00204	Yang Ye; Pengxiang Xia; Tianyu Zhou; Jing Du, PhD	User Experience and Workload Evaluation in Robot-Assisted Virtual Reality Welding Training
	CRC2024-D-23-00224	Arnav Jain, M.Sc. in Construction Management; Shimeng Dai; Sinem Mollaoglu; Kenneth Frank; Meltem Duva; Annick Anctil; Kristen Cetin	Iterative Development of Dynamic Student Project Team Interventions
	CRC2024-D-23-00245	Hongtao Dang; John Gambatese; Sathy Rajendran; Mandi Kime	Training Development for DEI and Psychological Safety in Construction
Friday (3/22)			
9:30-10:30 Construction Education, Workforce, Diversity, and Inclusion-4 (Khalid Osman)	CRC2024-D-23-00259	Amit Ojha; Houtan Jebelli	REVITALIZING STUDENTS' PERCEPTION AND KNOWLEDGE OF CONSTRUCTION SAFETY: LEVERAGING VIRTUAL REALITY AS AN EXPERIENTIAL LEARNING TOOL FOR CONSTRUCTION ROBOTIC SAFETY EDUCATION
	CRC2024-D-23-00279	Vineeth Dharmapalan; Khalid Osman	Diversity, Equity, and Inclusion in the Architecture, Engineering, and Construction Industry: A Subject Review
	CRC2024-D-23-00089	Ricardo Eiris; Josiane Isingizwe; Masoud Gheisari	Exploring Intersectionality of Gender and Race: Immersive Storytelling Videos and Perceived Expertise among Diverse Construction Professionals
	CRC2024-D-23-00352	Ali Golabchi; Yasser Mohammad; Aminah Robinson Fayek; Simaan AbouRizk	The University of Alberta's Construction Innovation Centre (CIC): Academia-Industry Collaboration for High-Impact Research
11:00-12:00 Construction Education, Workforce, Diversity, and Inclusion-5 (Khalid Osman)	CRC2024-D-23-00367	S M Jamil Uddin, MSc; Mahzabin Tamanna; Anto Ovid; Abdullah Alsharef; Alex Albert	Workforce Challenges Posed by the COVID-19 Pandemic: YouTube as a Data Source
	CRC2024-D-23-00377	Claudia Valeria Calle Müller; Mohamed ElZomor; Erika Rivera	Training Underserved Communities in Construction Trades for Social Mobility and Job Equity
	CRC2024-D-23-00423	Michaela LaPatin; Nicola Ritsch; Daniel Armanios; Leif Albertson; Lynn Katz; Kasey M. Faust	Addressing Workforce Attrition, Retention, Absenteeism, and Recruitment in the Rural Alaska Water Sector
1:30-2:30 Construction Education, Workforce, Diversity, and Inclusion-6 (Yuan Sun)	CRC2024-D-23-00431	Daniel Mehrabi; David Grau; Sam Ariaratnam	Impact of an International Research Experience on Graduate Student Advancement
	CRC2024-D-23-00452	Rebecca Kassa	Assessing the Overall Personality of Construction Project Teams: A Weighted Combination of Individual Team Member Personality Traits
	CRC2024-D-23-00460	Emma Sophie Stine, Ph.D.; Amy Javernick-Will	The Evolving Career Aspirations of Socially Minded Engineering and Construction Students
	CRC2024-D-23-00471	David Gutierrez, MBA	Personal Values to Foster the Inclusion of Minority-Owned Subcontractor Firms in the Procurement of Construction Services: A Preliminary Study
2:45-3:45 Construction Education, Workforce, Diversity, and Inclusion-7 (Yuan Sun)	CRC2024-D-23-00501	Guillermo Mejia-Aguilar, Ph.D.; Luis Fernando Arévalo-Viveros; Adriana Rocío Lizcano-Dallos; Edith Johanna Mendoza-Higuera	Learning Mathematics in Engineering Education: A Comparative Analysis Between European, Latin American and North American Contexts
	CRC2024-D-23-00506	Yunping Liang	Introducing A Sustainability Module to Civil Engineering Decision-Making Curriculum: A Students-as-Partners Design Planning
	CRC2024-D-23-00391	Rubaya Rahat, BSc; Mohamed ElZomor	Reinforcing The Connection Between Envision Rating System And Alternative Project Delivery Methods To Achieve Sustainable Infrastructures Through Construction Education
Saturday (3/23)			
8:45-9:45 Construction Education, Workforce, Diversity, and Inclusion-8 (Faizan Shafique)	CRC2024-D-23-00518	Anthony Olukayode YUSUF; Andres Nieto Leal; Abiola Akanmu; Homero Murzi; Alireza Shojaei; Philip Agee	Usability Evaluation of a Web-based Platform for Connecting Professional and Educational Communities: Instructors' Perspective
	CRC2024-D-23-00552	Soowon Chang, Jingdao Chen, and Jisoo Park	Review of Metaverse Technologies to Broaden Accessibility in Civil and Construction Engineering Education
	CRC2024-D-23-00582	Silvia Tijo-Lopez, Ph.D.; Oscar Humberto Portilla-Carreño; Guillermo Mejia-Aguilar	Inclusion of BIM and Sustainability in Construction Education through Capstone Design Projects
	CRC2024-D-23-00493	Y. Dong, Y. Hu, Ph.D., J. Cai, Ph.D.; X. Xu, Ph.D.; and S. Li, Ph.D.	Building Diversity in the Construction Industry: Examining Hiring and Performance Evaluation Practices for Equipment Operators under the Trend of Technology Transformation
10:00-11:00 Construction Education, Workforce, Diversity, and Inclusion-9 (Faizan Shafique)	CRC2024-D-23-00602	Deniz Besiktepe, Hasan Gokberk Bayhan, Rodolfo Valdes-Vasquez	Challenges in Supplier Diversity and Inclusions Programs in the U.S. Construction Industry
	CRC2024-D-23-00626	Yuhan Jiang, Ph.D.; Jerry Nave; Benjamin Uwakweh; Andrea Spool-White	Using iPad and 3D Simulation Technologies for Enhanced Student Learning in CM 224 Surveying Lab at North Carolina A&T State University
	CRC2024-D-23-00517	Woei-Chyi Chang; Sogand Hasanzadeh, Ph.D.; Behzad Esmaeili	A PIONEERING RESEARCH ON NEURODIVERSE ADHD WORKFORCE IN THE FUTURE CONSTRUCTION INDUSTRY
11:15-12:15 Construction Education, Workforce, Diversity, and Inclusion-10 (Faizan Shafique)	CRC2024-D-23-00632	Deepak Sharma, PhD; Rakeshkumar Mahto; Mansi Rastogi	Artificial Intelligence and Simulated Virtual Models in Teaching Construction Courses
	CRC2024-D-23-00655	Moustafa Y. Elsayed; Juyeong Choi	A Small-Scale Simulation Approach to Educate the Next Generation of Engineers about Sustainability Challenges in Building Demolition
	CRC2024-D-23-00594	Xi Wang, Ph.D.; Sogand Hasanzadeh	Understanding the Technology Adoption Challenges in Construction Industry through Experiential Learning Models