

CONSTRUCTION RESEARCH CONGRESS 2022

Health and Safety, Workforce, and Education

SELECTED PAPERS FROM THE CONSTRUCTION
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Preface

The Construction Research Congress (CRC) 2022 Organizing Committee, Virginia Polytechnic Institute & State University (Virginia Tech), the Construction Research Council, and the Construction Institute (CI) of the American Society of Civil Engineers (ASCE) are pleased to present the CRC 2022 Proceedings. CRC is one of the leading international conferences in the area of construction engineering and management. The Congress is held every two years, which provides a university the opportunity to serve and host colleagues across the world for the interactive exchange of ideas, knowledge and research findings. CRC 2022 was hosted by Virginia Tech and its Vecellio Construction Engineering and Management Program (VCEMP) in the Department of Civil and Environmental Engineering. The conference was held in Arlington, VA on March 9-12, 2022. CRC 2022 was part of the first-ever joint conference of the Construction Research Congress and the Construction Institute Summit. This combination of academic and industry experts promoted wide-ranging discussions about finding real solutions to the most pressing societal and industry problems.

The theme of the CI & CRC Joint Conference was: "Next Generation Construction." The joint conference's technical program provided insights on the latest research and industry practices that will lead to next generation techniques, technologies, and strategies to meet the many 21st century challenges in construction and the built environment. This unique setting allowed academic and industry peers from around the world to share insights with one another to promote progress in both research and practice.

The Conference Proceedings contain 405 peer-reviewed technical papers, which were developed from over 690 abstract submissions. All submissions went through a two-step review process with a minimum of two external reviewers per paper, by a scientific community of hundreds of international construction experts. The work was exhibited at the conference in short presentations. The resulting proceedings are divided into four volumes:

- Volume I: Infrastructure Sustainability and Resilience (69 papers)
- Volume II: Computer Applications, Automation and Data Analytics (144 papers)
- Volume III: Project Management and Delivery, Controls, and Design and Materials (113 papers)
- Volume IV: Health and Safety, Workforce, and Education (79 papers)

On behalf of the Organizing Committee, Virginia Tech, the Construction Research Council and the ASCE Construction Institute, we hope that the CRC 2022 proceedings reflect the vitality of the first-ever CRC and CI Joint Conference as well as our community's research and its potential to better our industry.

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Organizing Committee
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Contents

Construction Education

Integration of Virtual Technology as a Pedagogical Tool in Construction Knowledge Transfer	1
Ramyani Sengupta and Anthony E. Sparkling	
Developing Context and Practice-Based Curricula in Construction Engineering and Management.....	10
Diana M. Franco Duran	
Full Scale Augmented Reality to Support Construction Sequencing Education Case Study	21
Kieren H. McCord, Steven K. Ayer, Karan R. Patil, Wei Wu, Jeremi S. London, and Logan A. Perry	
Assessing the Impact of Humanitarian Engineering Coursework on Upper-Division Undergraduate Engineering Identity Development	31
Leigh C. Hamlet and Jessica Kaminsky	
Construction Industry Institute's Impact on Construction Engineering and Management Academic Publications.....	40
Amelia Celozza, Fernanda Leite, and Daniel P. de Oliveira	
Integrating Front-End Planning and Infrastructure Sustainability in Construction Education through Problem-Based Learning.....	49
Valentina Ferrer, Rubaya Rahat, Piyush Pradhananga, and Mohamed Elzomor	
Correlation between Brain Cognitive Response and Online Questionnaire during Construction Safety Training in Virtual Reality	60
Krishna P. Kisi and Tulio Sulbaran	
Feasibility of Embodied Virtual Agents for Augmenting Students' Knowledge of Robotic Safety in Construction	70
Amit Ojha, Mahmoud Habibnezhad, and Houtan Jebelli	
A Network-Based Approach to Understand Potentials for On-the-Job Training in Construction Professions	81
Xi Chen and Mohammad Ilbeigi	

Unmanned Aircraft Vehicles in Construction and Engineering Higher Education Programs	90
Christofer M. Harper, Mohammed Mehany, and Manish Parajuli	
VR-OnSite—Online Site Visits Using Web-Based Virtual Environments	100
Ricardo Eiris, Yuan Sun, Masoud Gheisari, Brent Marsh, and Pasi Lautala	
Evaluating the Effectiveness of Extracurricular Online Workshops on Student Learning in Construction.....	110
Yewande S. Abraham, Bilge Gokhan Celik, Max Spaan, and Natalie Mansson	
Operationalization of Desirable Skill Sets in Novice Construction Professionals	120
Yamoah Agyemang Daniel, Patrick S. W. Fong, and Kissi Ernest	
Improving BIM Integration and Implementation in Construction Education.....	131
Siyuan Song, M. Ammar Alzarrad, and Sungjin Kim	
Conversational Virtual Humans on 360-Degree Virtual Sites: Guiding Students on a Site Visit to a Mechanical Room.....	140
Jing Wen and Masoud Gheisari	
International Construction Education Experiences: Designing a Comprehensive Research Approach	150
Verena Schneider, David Grau, and Samuel T. Ariaratnam	
Exploring Disaster Preparedness and Awareness due to Natural Hazards Using Structural Equation Modelling (SEM).....	160
Ronik Ketankumar Patel, Roya Etminani-Ghasroodashti, Sharareh Kermanshachi, and Mohammadsoroush Tafazzoli	
Students' Perception of Instructional Delivery Methods Utilizing Various Teaching Modalities in an Integrated Construction Management Curriculum.....	172
Joseph P. Cleary, Stacy Kolegraff, and Andrew R. Kline	
Use of Virtual Site Visits in Construction Management Distance Education	182
Alireza Shojaei, Amirsamman Mahdavian, Saeed Rokooei, and Ahmed Al-Bayati	
The Impact of Remote Learning on College Students' Workload and Productivity during the COVID-19 Pandemic.....	192
Biao Kuang, Chi Tian, Hongyue Wu, Yunfeng Chen, and Luciana Debs	
Data Analytics and Computational Thinking Skills in Construction Engineering and Management Education: A Conceptual System	204
Abiola A. Akanmu, Vincent S. Akligo, Omobolanle R. Ogunseiju, Sang Won Lee, and Homero Murzi	

Relationship between Student Engagement and Academic Network Properties	214
Zhiting Chen and Dong Zhao	

Learning Factory for Construction to Provide Future Engineering Skills beyond Technical Education and Training	224
Jochen Teizer and Christos Chronopoulos	

Concept Maps Lead to Better Problem Statements: An Empirical Study Measuring the Effects of Priming Students to Think in Systems	234
Paulo Ignacio Jr., Julie Milovanovic, Tripp Shealy, and John Gero	

Concept Maps Decrease Students' Neurocognitive Demand When Thinking about Engineering Problems	244
Ushma Manandhar, Mo Hu, Julie Milovanovic, Tripp Shealy, and John Gero	

Exploring the Benefits of Social Presence Enabled Augmented Reality Platform for Online Learners	254
Saurav Shrestha, Yongwei Shan, and Brian Chung	

Health, Safety, and Workforce Issues

Are Multimedia Training Interventions Effective within Traditional Safety Training Frameworks?	264
Sreeja Thallapureddy, Siddharth Bhandari, and Alex Albert	

Incident Investigations and Learning: Methods, Barriers, and Opportunities	274
Sreeja Thallapureddy, Siddharth Bhandari, Matthew R. Hallowell, Fred Sherratt, Evan Stoddard, and Hayley Hansen	

Leveraging Natural Language Processing to Identify Health and Safety Challenges during Post-Disaster Reconstruction	284
S. M. Jamil Uddin, Mahzabin Tamanna, Alex Albert, and Nipesh Pradhananga	

Defining Serious Injuries on Construction Jobsites: Lessons from the Literature	294
Arnaldo Bayona, Siddharth Bhandari, and Matthew R. Hallowell	

Musculoskeletal Disorders in Concrete Formwork Construction	304
Ziyu Jin and John Gambatese	

Development of Strategies to Improve Health and Safety of Women in Construction Industry: A Delphi Method	314
Apurva Pamidimukkala and Sharareh Kermanshachi	

Feasibility of a Mobile Electroencephalogram (EEG) Sensor-Based Stress Type Classification for Construction Workers	324
Gaang Lee and SangHyun Lee	

Lean-Based Integrated Approach for Manual Work Design Optimization in Modular Construction	335
Ahmed Zaalouk and SangHyeok Han	
Assessing the Safety Climate of a State Department of Transportation through Its Highway Maintenance Crews.....	345
Ashtarout Ammar, Zamaan Al-Shabbani, and Gabriel Dadi	
Toward a Safety Culture Model for Small Construction Organizations	356
Ashtarout Ammar, Zamaan Al-Shabbani, and Gabriel Dadi	
A Novel Map-Matching Algorithm for Relating Work Zones and Crashes	366
Zhuoran Zhang, Burcu Akinci, and Sean Qian	
Reducing Harassment for Women in the Professional Construction Workplace with Zero-Tolerance and Interventionist Policies.....	376
Candice Sexton and Jiansong Zhang	
Annual Revenue's Influence on the Safety Performance of Construction Firms	386
Ahmed Jalil Al-Bayati and Ali A. Karakhan	
Review of Safety Resilience in Construction: Current Research Status, Challenges, and Future Needs	393
Joshua D. Robbins, Jun Wang, and Behzad Esmaeili	
Impact of Green Construction on Safety Performance in the Built Environment	403
Ali A. Karakhan, Ahmed Jalil Al-Bayati, Hashem Izadi Moud, and Ola T. Al-Saffar	
Construction Hazard Recognition: A Smart Literature Review.....	412
S. M. Jamil Uddin, Abdullah Alsharef, Alex Albert, and Siddharth Bhandari	
Enhanced Situational Awareness in Worker-Robot Interaction in Construction: Assessing the Role of Visual Cues.....	422
Shayan Shayesteh and Houtan Jebelli	
A Study on Assessing the Awareness of Heat-Related Illnesses in the Construction Industry	431
Siyuan Song and Fan Zhang	
Risk Assessment for Using UAS in Construction: A Fuzzy Analytical Hierarchy Process	441
Yiye Xu and Yelda Turkan	
Smart Robotic System to Fight the Spread of COVID-19 at Construction Sites.....	452
Jonathan Seagers, Yizhi Liu, and Houtan Jebelli	

Safety Culture Element System and Its Management Mechanism Analysis in Construction Projects	462
Yuecheng Huang, Zhihuai Zhang, Yao Wang, and Dongping Fang	
Comprehensive Analysis on the Adoption of the Multiskilling Strategy among Craft Professionals.....	471
Rakan Albalawi, Paul M. Goodrum, Tim Taylor, Kevin Real, and Mohammed A. Albattah	
Assessing Lower Extremity Kinematics of Roofing Tasks.....	481
Matin Jahani Jirsaraei, Behzad Esmaeili, and Parth Pathak	
Occupational Health and Safety Challenges in Construction Industry: A Gender-Based Analysis.....	491
Apurva Pamidimukkala and Sharareh Kermanshachi	
Hiring for the New Age: Job Advertisements and the Transportation Workforce.....	501
Kristal Metro, Susan M. Bogus, and Christofer Harper	
Preventative Safety Metrics with Highway Maintenance Crews	510
Zamaan Al-Shabbani, Ashtarout Ammar, and Gabriel Dadi	
Safety Risks of Reconstruction Workers in Clean-Up and Recovery Phase due to Natural Hazards	520
Apurva Pamidimukkala, Sharareh Kermanshachi, and Thahomina Jahan Nipa	
Construction Safety Training Interventions: State of the Science and Future Opportunities.....	531
Abdullah Alsharef, S. M. Jamil Uddin, Alex Albert, Siddharth Bhandari, and Edward Jaselskis	
The Impact of the Covid-19 Pandemic on Construction Labor Force and Performance Metrics: A Case for Automation	541
Olugbenro Ogunrinde, Ifeanyi U. Okpala, Muhammad T. Hatamleh, Opeyemi Oyeyipo, and Rapheal A. Ojelabi	
Review for Construction and Demolition Waste Materials and Control Practices in the US	552
Abdulaziz Alwadhenani, Yoojung Yoon, and Radhey Sharma	
Random Forest Analysis of Occupational Accident Reports among Roofing Contractors	561
Ikechukwu S. Onuchukwu and Behzad Esmaeili	

Biomechanical Analysis in Construction Engineering and Management Research: A Review	571
Abdullahi Ibrahim, Chukwuma Nnaji, and Ziyu Jin	
Measures to Boost Mental Health in the Construction Industry: Lessons from the Nigerian Workplace	580
Janet M. Nwaogu and Albert P. C. Chan	
Numerical Simulation of Asphalt Fumes Diffusion during Pavement Construction Using CFD Method	590
Hui Hou, Dan Chong, and Qi Feng	
Noise Management in Construction: Identifying Strategies and Controls for Improvement	600
Ifeanyi Okpala, Tolulope Sanni, and Chukwuma Nnaji	
The Construction Industry from the Perspective of the Worker's Social Experience	611
Bassam A. Ramadan, Timothy R. B. Taylor, Kevin J. Real, and Paul Goodrum	
Working Safely with Drones: A Virtual Training Strategy for Workers on Heights	622
Eduardo Mendes, Gilles Albeaino, Patrick Brophy, Masoud Gheisari, and Idris Jeelani	
Investigating Hazards and Safety Risks Inherent in Human-Robot Interactions	631
Ifeanyi Okpala, Chukwuma Nnaji, and John Gambatese	
Role of Safety Training in Reducing Fatigue among Construction Workers	641
Mostafa Namian, Ahmed Al-Bayati, and Chukwuma Nnaji	
Enhancing Workers' Vigilance to Electrical Hazards through a Virtually Simulated Accident	651
Namgyun Kim, Changbum R. Ahn, Austin Miller, Robert Dibello, Daniel Lobello, Somyung Oh, and Ann McNamara	
Evaluation of Construction Workers' Emotional States during Virtual Reality-Based Safety Training	660
Kwonsik Song, Gaang Lee, SangUk Han, and SangHyun Lee	
Analysis of Gender Perception in the Construction Sector: Colombian Case	670
Cristian Camilo Osorio Gómez, Marieth Stephany Castro Forero, Candice Starr Sexton, Jiansong Zhang, and Lina Verónica Zuluaga Botero	
Do OSHA 10/30-Hours Training Programs Revamp the Safety Attitudes of Construction Workers?	679
Mostafa Namian, Mohammadsorouh (Tommy) Tafazzoli, Sharareh (Sherri) Kermanshachi, and Yilei Huang	

Scale Equivalence in Canada and the United States for Interpersonal Conflicts at Work and Individual Resilience in the Construction Sector	688
Yuting Chen, Brenda McCabe, Jun Wang, and Douglas Hyatt	
Impact of Hazard State on Construction Workers Safety Risk Assessment.....	696
Abdullahi Ibrahim, Chukwuma Nnaji, Mahmoud Shakouri, and Mostafa Namian	
A Gender Analysis of Construction Executive Career Path Progression Using LinkedIn Data.....	706
Paul J. Hickey, Veronica Hercules, Adam Johnson, Abdolmajid Erfani, and Qingbin Cui	
Spatial Exposure to Dynamic Safety Hazards in Construction Sites through 360-Degree Augmented Panoramas: Ecological Validity in Safety Research	715
Kyeongsuk Lee, Sogand Hasanzadeh, and Behzad Esmaeili	
Physical, Mental, and Emotional Health of Construction Field Labors Working in Extreme Weather Conditions: Challenges and Overcoming Strategies	726
Sanjgna Karthick, Sharareh Kermanshachi, and Mostafa Namian	
Health and Safety of Construction Field Workforce Active in Extreme Weather Conditions	737
Sanjgna Karthick, Sharareh Kermanshachi, and Issa Ramaji	
Utility of Wearable Sensing Devices for Environmental Monitoring on Construction Sites	748
Ibukun Awolusi, Antonio Martinez-Molina, Chukwuma Nnaji, Miltiadis Alamaniotis, and Tulio Sulbaran	
Effect of Time Pressure and Cognitive Demand on Line Workers' Risk-Taking Behaviors: Assessment of Neuro-Psychophysiological Responses in a Mixed-Reality Environment.....	759
Shiva Pooladvand, Beyza Kiper, Aditya Mane, and Sogand Hasanzadeh	
Safety Innovation Adoption in Construction: Role of Safety Compliance and Safety Attitude.....	770
Tolulope O. Sanni, Chukwuma Nnaji, Ibukun Awolusi, and Ahmed Al-Bayati	
Investigation of Factors Impacting Situation Awareness of Highway Workers and Applicable Warning Methods	780
Wenjun Han, Nazila Roofigari-Esfahan, and Ginny Nayyar	