October 18, 2024

Elevating the Performance of the Built Environment through Cyberphysical Systems

ABSTRACT: As the construction industry has faced pressing challenges, including lagging improvement in productivity, high fatality rate, and lack of skilled laborers, recent research efforts have been made to address these challenges using emerging technologies originally developed in other disciplines. Despite the remarkable advances in such technologies, the construction industry still lags behind other industries in the adoption of technologies due to the unique characteristics of construction projects. In this context, this presentation will focus on how emerging technologies can be adopted to address existing construction-domain problems from the perspective of construction management which is planning, coordinating, and managing every aspect of construction projects from start to finish. This presentation will discuss various construction management approaches trying to make construction sites intellectual and connected to create a safer and more productive environment by leveraging different emerging technologies.

Jerome P. Lynch

Professor, Department of Construction Management, UH

Seminar Details

Friday, October 11, 2024 2:30pm – 4:00pm

UH Campus Classroom & Business Building Room CBB 104

Online via Teams https://www.cive.uh.edu/research/beyer-distinguished-lecture

BIOGRAPHY: Dr. Kinam Kim is an Assistant Professor in the Department of Construction Management at the University of Houston. His research interests aim to advance automated systems in the area of construction engineering and management for interactive, informative, and connected environments in the entire life cycle of construction projects through the use of multidisciplinary methods. By using emerging technologies such as Artificial Intelligence (AI), Internet of Things (IoT), Big data analysis, computer vision, and wearable device systems, his recent research covers development of the automated systems that acquire, process, interpret, and share useful information in construction effectively and efficiently, which ultimately enhances decision-making processes for various aspects of construction projects. He earned B.S. and M.S. degrees in Civil and Environmental Engineering from Yonsei University, Seoul, South Korea in 2014 and 2016, respectively. He also earned a Ph.D. degree in Civil Engineering from the Georgia Institute of Technology in 2022. He participated in various research projects sponsored by the National Science Foundation, Transportation Research Board (TRB), Georgia Department of Transportation (GDOT), Construction Industry Institute (CII), Chevron, and Dysruptek. These projects include fundamental theoretical research, hardware & software development, and commercialization. Dr. Kim joined the faculty of the Department of Construction Management at the University of Houston in September 2022.