

Interdisciplinary Research in Construction Using Artificial Intelligence and Simulation

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Construction industry needs to adapt to the emergence of new technologies in the areas of automation, artificial intelligence, and robotics. Much of the research performed in the field of construction is academic in nature, and there is a lack of investigation into practical applications. However, it is very important that research and practice go hand-in-hand to be able to solve new and complex problems in construction such as the challenges related to the COVID-19 pandemic and global environmental changes. Many problems in construction industry such as schedule delays or cost overruns, were due to poor or late decision-makings and a lack of advanced methods for analyzing dynamic construction practices and processes. It is of the highest importance that academic research in construction not only copes with emerging technologies, but also leads the industry by advancing both practical and theoretical knowledge.

The goal of this research talk is twofold: (1) to present my past research in construction engineering and management and explaining how I performed interdisciplinary research; and (2) to introduce my future research agenda and to support future opportunities of interdisciplinary research collaborations at UNBC.

The talk is intended to be largely accessible for a wide audience in science and engineering. Undergraduate and graduate students are especially welcomed!

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