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SPDC Research Seminars

Taehwan Hyeon

Taehwan Hyeon is a researcher at the Architecture & Urban Research Institute in Korea, specializing in urban safety, facility management, and data-driven analysis of fire risks in the built environment. He earned his Ph.D. in Urban Planning from Seoul National University and a Master's degree in Urban and Regional Planning from the University of Florida. Currently, he is a visiting scholar at Michigan State University. His research integrates spatial data, machine learning, and policy analysis to enhance resilience and sustainability in cities, bridging academic insights with practical urban management strategies.

A Study on the Impact Factors of Fire Incidents and Identification of Fire Risk Areas in Seoul.

This study explores the factors shaping urban fire risks in Seoul, distinguishing between human-caused and physically-caused fires. Drawing on urban ecology and social disorganization theory, it examines socioeconomic, crime-related, and physical variables at the census tract level. Regression, spatial analysis, and machine learning are used to identify high-risk areas. The findings highlight how social conditions and building characteristics influence fire vulnerability, offering insights for more targeted prevention and urban planning strategies.

for any question, please contact dz@msu.edu