

Abstracts

Plenary Presentations

AI at the Crossroads: Transforming Entire Sectors for a Smarter and Sustainable Future

Dr Luana Parisi

Senior Lecturer in Construction Engineering and Management

ACE School, E&C Department, University of East London

Artificial Intelligence (AI) is revolutionising entire sectors, including the education and the built environment, driving innovation towards a smarter and more sustainable future. This work examines AI's transformative potential in personalised learning, resource optimisation, and sustainable urban development, highlighting its ability to enhance efficiency and enable data-driven decision-making. However, it also addresses the challenges hidden behind this transformation, including issues of data privacy, ethical dilemmas, digital equity, and the potential for over-reliance on automated systems. By exploring advancements such as adaptive learning technologies and intelligent infrastructure, this work underscores both the opportunities and the complexities of AI. It advocates for collaboration among policymakers, educators, industry, and researchers to ensure AI is implemented responsibly and inclusively. At the intersection of education and the built environment, this work emphasises the need to balance innovation with ethical foresight to create a future that is both intelligent and sustainable.