

Demystyfing AI in Architectural Design

Image Source: Architecture and Design Scotland

This document collates the key takeaways from the Demystifying AI in Architectural Design event, organised by Architecture and Design Scotland, on 12 November 2026 at A&DS:SpACE, Edinburgh Futures Institute.

Artificial intelligence is beginning to influence many aspects of architectural practice. Its role remains largely supplementary rather than transformative. Current applications are primarily focused on report writing, visualisation, site analysis, design evaluation and administrative tasks, with practices still exploring how AI can be integrate into established workflows. AI is currently more effective at supporting early-stage tasks than later stages, where negotiation, stakeholder engagement, client decision-making and contractor coordination continue to rely heavily on human expertise and professional judgement. The event highlighted that AI is generally automating individual tasks rather than replacing entire professional roles.

AI presents an opportunity to reduce repetitive and time-consuming work, allowing professionals to focus more on creativity, design development, client engagement and interdisciplinary collaboration. Rather than simply increasing productivity, the discussion encouraged consideration of how time saved through AI can be reinvested in activities where human judgement and design thinking add the greatest value.

The profession continues to confront important questions around design quality and originality. AI-generated imagery can create the impression of a resolved design before key decisions have been tested, while the increasing ease of producing visualisations raises concerns about architectural work becoming more generic. Participants stressed the importance of ensuring that attractive imagery does not replace critical design thinking, technical rigour or contextual understanding.

A recurring theme was the need to protect learning and professional development within architecture. Many of the tasks currently being automated have traditionally helped emerging professionals develop core skills and experience. As AI becomes more widely adopted, practices will need to consider how knowledge, mentoring and professional development opportunities are maintained.

The event repeatedly returned to the importance of understanding place. While AI can support analysis and decision-making, successful design still depends on understanding local context, communities, culture and human experience. Technology should help designers understand places better, rather than distract them from the realities of the environments they are designing for.

The strongest message from the event was that AI should augment, not replace, the role of the architect. Designers will increasingly act as critical thinkers, coordinators and evaluators of information, directing processes rather than simply producing outputs. Professional judgement, ethical responsibility and decision-making remain fundamentally human responsibilities.

As the technology develops, architects have an important role in shaping how AI is used within the profession. Adoption should be critical and proportionate, recognising both the opportunities and the environmental and professional challenges that accompany it. The future impact of AI will depend not only on technological capability, but on the choices made by practitioners, practices and the wider profession.

Speakers:

Dr Juliana Martins | Professor of Urban Design and Planning, Bartlett School of Planning

Dr Bahar Durmaz-Drinkwater | Associate Lecturer, Bartlett School of Planning

Kathryn Firth | Consultant for Cities, Planning and Design, Arup

Pei-Chin Lin | Senior Designer and AI Enabler, Arup

Panelists:

Alexandros Veloudis | Architect, Austin-Smith:Lord

Rowan Mackinnon-Pryde | Architect, STUDIO NIRO

Brian Mark Evans | Professor of Urbanism & Landscape, Glasgow School of Art