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Altri autori (Persone)	RuivoCatarina VianaDavid Leite Vieira VazJorge
Disciplina	352.56
Soggetti	Facility management Building information modeling Computer-aided engineering Urban economics Virtual reality Augmented reality Facility Management Building Information Modeling Computer-Aided Engineering (CAD, CAE) and Design Urban Economics Virtual and Augmented Reality
Lingua di pubblicazione	Inglese
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Nota di contenuto	TopologicPy a Syntopic Integration of Geometry, Topology and Semantics in Architectural Design -- AI and architecture -- Deciphering Urban Morphogenesis A Morphospace Perspective -- Co learning between research and practice in planning: adresssing the physical form of cities -- Combining space syntax and kernel methods in the delimitation of the Matosinhos Urban Pressure Zone -- Adaptation of Plot systems a method for analysing space and time -- Measuring the

impact of urban structures shaped by topography on the competitiveness between car and pedestrian a GIS simulation on Salvador vs San Francisco -- Advancing Spatial Cognition Analysis Integrating Agent-Based Modelling with Space Syntax in the NetLogo Framework -- Visualizing Urban Experience AI and Computer Vision Framework for Historic Commercial Streets in Egypt -- The Effect of Potential Urban Elements on Finding Direction in Urban Space Exemplifying Of Kadiköy Yeldegirmeni, Istanbul,Turkey -- Reimagining Human-Nature Coexistence: An Integrative Approach to Architectural Design with Biomimicry, Generative Modeling, and AI -- Reimagining Digitalized Space Integrating Meaning and Technology in Building Systems -- Parametric Software to Support Architectural Design strategies -- Optimizing Sustainability through digital tools Energy and Carbon Comparative Analysis of Brick, Concrete and Wood Frame Constructions in Coimbra Residences -- Reassembling Waste: Towards a Carbon Zero Built Environment -- Advancing Architectural Visualization Boosting Scale and Reality with Augmented Reality -- Architecting the Metaverse A Paradigm Shift in Architecture Co-Design.

Sommario/riassunto

This book comprises the select proceedings of the 7th International Symposium on Formal Methods in Architecture (7FMA), held in Porto, Portugal, in December 2024. The contents focus on the use of methodologies, especially those that have witnessed recent developments stemming from mathematical and computer sciences and are developed in a collaborative way with architecture and related fields. This book constitutes a contribution to the debate and to the introduction of new methodologies and tools in the mentioned fields that derive from the application of formal methods in the creation of new explicit languages for problem-solving in architecture and urbanism. Some of the themes are CAD and BIM, mixed realities, photogrammetry and 3D scan, architectural design automation, urban and building performance analysis, SCAVA-space configuration, accessibility, and visibility analysis. The book serves as a valuable resource for those in academia and industry.
