Record Nr. UNINA9910299929703321 Informed Architecture: Computational Strategies in Architectural **Titolo** Design / / edited by Marco Hemmerling, Luigi Cocchiarella Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-53135-2 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XV, 193 p. 162 illus., 114 illus. in color.) Disciplina 519 Soggetti Applied mathematics **Engineering mathematics** Technical education Interior architecture Interiors Graphic design Mathematical and Computational Engineering Engineering/Technology Education Interior Architecture and Design Graphic Design Interaction Design Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. This book connects the different topics and professions involved in Sommario/riassunto information technology approaches to architectural design, ranging from computer-aided design, building information modeling and programming to simulation, digital representation, augmented and virtual reality, digital fabrication and physical computation. The contributions include experts' academic and practical experiences and findings in research and advanced applications, covering the fields of architecture, engineering, design and mathematics. What are the conditions, constraints and opportunities of this digital revolution for

architecture? How do processes change and influence the result? What

does it mean for the collaboration and roles of the partners involved. And last but not least: how does academia reflect and shape this development and what does the future hold? Following the sequence of architectural production - from design to fabrication and construction up to the operation of buildings - the book discusses the impact of computational methods and technologies and its consequences for the education of future architects and designers. It offers detailed insights into the processes involved and considers them in the context of our technical, historical, social and cultural environment. Intended mainly for academic researchers, the book is also of interest to master's level students.