

Dennis Shelden

Director, Center for Architecture Science and Ecology (CASE) at Rensselaer Polytechnic Institute

Troy, NY, US

Co-Director of the Institute for Energy, the Built Environment, and Smart Systems (EBESS) and leading expert on dynamic building systems.

Biography

Dennis Shelden is a licensed architect, academic, author, and entrepreneur, whose experience spans architecture, engineering, and computer science applications to professional practice and the built environment. He writes and lectures widely on these topics from theoretical and technical as well as professional practice, economic, and industry transformation perspectives. Dennis joined the architecture firm Gehry Partners in 1997 while still in MIT's PhD program, first as Director of Research and Development, then as Director of Computing, and was responsible for the management and strategic direction of the firm's computing program including software and process development, research, IT infrastructure, and partnerships. His PhD Thesis Digital Surface Representation and the Constructability of Gehry's Architecture remains a widely referenced treatise on the motivations and technical underpinnings of the firm's revolutionary applications of digital modeling to the design and delivery of complex buildings. In 2002 he co-founded the spinoff company Gehry Technologies, serving as Chief Technology Officer on the development of several software products and Project Executive on numerous ground breaking building projects until the firm's acquisition by Trimble in 2014. He co-directs the technical program for BuildingSmart International, the building industries' open information standards body, where he leads efforts to develop technology platforms for open data Web and cloud based building design, construction and operations systems. His publications have appeared in journals including AD: Architectural Design, TAD: Technology and Architectural Design, and the Journal of Construction Automation, and he has been interviewed in publications including the Economist, New York Times, Design Intelligence, and Engineering News Record. He is editor for the forthcoming book series Practical Revolutions: Professional Applications of Disruptive Technologies to Building, published by Wiley.

Areas of Expertise

Cloud Based Building Systems, Generative Modelling, Built Environments, Smart Systems, Open Data Over the Web

Education

Massachusetts Institute of Technology

Doctorate Philosophy of Design and Computation

Massachusetts Institute of Technology

Master of Science Civil and Environmental Engineering

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