Today, in the beginning of the 21th century, we are in a moment of profound and accelerated changes in the way we perceive and interact with the world, which many authors, as Klaus Schwab, do not hesitate to call as the Fourth Industrial Revolution. Extraordinary advancements in areas like mobile communication, artificial intelligence, big data, cloud computing, blockchain, nanotechnology, biotechnology, facial recognition, robotics or additive manufacturing are fusing the physical, biological and digital systems of production. Such technological context has triggered a series of disruptive concepts and innovations, like the smart-phone, social networks, online gaming, internet of things, smart materials, interactive environments, personal fabrication, 3D printing, virtual and augmented realities, drones, self-driving cars or the smart cities, which, all together, are drawing a radically new world.

This edition relies on the unique eCAADe SIGraDi joint conference that took place at FAUP Porto in 2019, and addresses how architecture is facing these challenges and shaping this revolution.

Scope of the Special Issue

- Fusion of physical, digital and biological systems in architecture
- Disruptive technologies in architectural design, research, teaching and building
- Design for sustainable buildings, cities and environments
- BIM, Parametric, AI and expert systems in design
- Smart materials, interactive and responsive environments
- Digital history, theory and culture
- Robotics, digital manufacture processes and materials

Deadlines

- Manuscript Submission: 20th March 2020
- Notification of acceptance: 1st May
- Final papers due: 29th July
- Publication Date: December 2020

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