

Smart Cities' Sustainable Modular Houses Architecture

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Abstract : Smart cities are a framework of technologies along with sustainable infrastructure to provide their citizens an improved quality of life, safer environment, affordability, and more, which in turn helps with the society's economic growth. The proposed research will focus on the primary building block of the smart city; the infrastructure of the house itself. The traditional method of building houses has been, for a long time, nothing but a costly manufacturing process, and consequently, buying a house becomes not an option for everyone anymore. The smart cities' Modular Houses are not using traditional building construction materials; the design reduces the common lengthy construction times and associated high costs. The Modular Houses are technological homes, low-cost and customizable based on a family's requirements. In addition, the Modular Houses are environmentally friendly and healthy enough to assist with the pandemic situation.

Keywords : smart cities, modular houses, single-unit property, multi-unit property, mobility features, chain-supply, livable environment, carbon footprint

Conference Title : ICSCSU 2023 : International Conference on Smart Cities and Sustainable Urbanism

Conference Location : New York, United States

Conference Dates : January 30-31, 2023