World Academy of Science, Engineering and Technology
International Journal of Architectural and Environmental Engineering
Vol:16, No:04, 2022

Smart Airport: Application of Internet of Things for Confronting Airport Challenges

Authors : Ali Safaeianpour, Nima Shamandi

Abstract : As air traffic expands, many airports have evolved into transit centers for people, information, and commerce, and technology implementation is an absolute part of airport development. Several challenges are in the way of implementing technology in an airport. Airport 4.0 proposes the "Smart Airport" concept, which focuses on using modern technologies such as Big Data, the Internet of Things (IoT), advanced biometric systems, blockchain, and cloud computing to alter and enhance passengers' journeys. Several common IoT concrete topics as partial keys to smart airports are discussed and introduced, ranging from automated check-in systems to exterior tracking processes, with the goal of enlightening more and more insightful ideas and proposals about smart airport solutions. IoT will dramatically alter people's lives by infusing intelligence, boosting the quality of life, and assembling it smarter. This paper reviews the approaches to transforming an airport into a smart airport and describes several enabling components of IoT and challenges that can hinder the implementation of a smart airport's function, which require to be addressed.

Keywords : airport 4.0, digital airport, smart airport, IoT
Conference Title : ICABE 2022 : International Conference on Architecture and Building Engineering
Conference Location : New York, United States
Conference Dates : April 25-26, 2022