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Automatic sheltering - An IoT-enabled solution for outdoor environments

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Abstract:

Automatic Sheltering, represents a groundbreaking solution empowered by the Internet of Things (IoT) tailored for outdoor environments. This innovative system offers automated protection against environmental elements such as rain, wind, or sunlight, eliminating the need for manual intervention. Leveraging IoT technology, it seamlessly integrates sensors, actuators, and auto- mated controls to deploy shelters, including tents or canopies, in response to specific triggers or conditions. The study delves into the practical applications, ad- vantages, and technological intricacies of "Automatic Sheltering" across diverse outdoor settings, spanning emergency situations, outdoor events, and temporary residential setups. Furthermore, it explores the potential of IoT-enabled "Automatic Sheltering" to significantly enhance safety, operational efficiency, and overall resilience in outdoor environments. This comprehensive examination sheds light on the transformative potential of this innovative approach in revolutionizing the way outdoor spaces are managed and protected.

Keywords:

Outdoor Environments, Internet of Things (IoT), Automated Controls, Sensors, Actuators, Automatic Shelter