

Lightweight Synergy IoT Framework for Smart Home Healthcare for the Elderly

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Abstract : Smart Home Healthcare technologies for the elderly represent a transformative paradigm that leverages emerging technologies to provide the elderly' health indicators and daily life monitoring, emergency calls, environmental monitoring, behavior perception, and other services to ensure the health and safety of the elderly who are aging in their own home. However, the excessive complexity in the main adopted framework has affected the acceptance and adoption of the elderly. Therefore, this paper proposes a lightweight synergy architecture of IoT data and service for elderly home smart health environment. It includes the modeling of IoT applications and their workflows, data interoperability, interaction, and storage paradigms to meet the growing needs of older people so that they can lead an active, fulfilling, and quality life.

Keywords : smart home healthcare, IoT, independent living, lightweight framework

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