

Smart Devices and IoT in Industrial Applications

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Smart devices have become crucial components of our everyday lives, influencing many aspects of society and significantly altering the way we engage with the outside world. The upcoming era of the Internet of Things (IoT) and the arrival of 5G technology are investigated, offering insights into how these advancements are changing the communication environment. The developed concept for defining smart device is based on three main features, namely context-awareness, autonomy and device connectivity [2]. Household chores are made easier by connected gadgets, which enable us to remotely check energy consumption, change lights, and prepare ovens. Wearables in the healthcare industry enable people to monitor vital signs, take care of long-term medical disorders, and obtain real-time health data. In the consumer market, IoT technology is most synonymous with merchandise regarding the concept of the "Smart Domestic", overlaying gadgets and home equipment [3]. In addition to traditional voice communication and messaging functionality, a smart phone usually provides personal information management (PIM) applications and some wireless communication capacity [1]. However, the rapid adoption of smart devices also raises concerns. These linked systems have security and privacy flaws that expose user information and leave networks open to hackers. Issues of data ownership, algorithmic prejudice, and the possibility of corporate and governmental manipulation come up for ethical consideration. The pervasive integration of smart devices and IoT heralds a transformative era, revolutionizing industries and daily life. The multifaceted applications of IoT, spanning healthcare, transportation and agriculture, underscore its profound impact. The industrial environment will see previously unheard-of levels of efficiency, connectedness, and innovation as we welcome the impending future. This will create a dynamic revolution that has the potential to completely transform the way we work and live.

Keywords: Personal Information Management, Internet of Things (IoT), Human Autonomy.

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