Abstract

Nowadays Wireless Communications are widely embedded in various ubiquitous computing models and applications. Ubiquitous computing is considered as a new technology paradigm that should be probed as one of Wireless Communications recent implementations. Ubiquitous computing, pervasive computing, everyware computing, ambient intelligence, haptic computing, and Internet of Things are all aliases to one technology where systems are available anywhere and anytime, to anyone, where and when needed. Practically, the differences between these terms is of an academic nature; they are commonly aiming to the goal of assisting people as well as the continuous improvement and promotion of economic and social processes by taking advantages of communicating with numerous microprocessors and sensors integrated into the environment. This article provides an overview of ubiquitous computing requirements and operational concept as well as pervasive services main characteristics. Consequently the key challenges facing the implementation and extension of ubiquitous computing as well as the main technologies used for this purpose are outlined. There are so many application domains that are adopting the ubiquitous computing concept; some of those will be presented. By the
end of the research the author would like to give a good reference article that can help a lot of researchers interested in this field.

References


Index Terms

Computer Science  Wireless

Keywords
Internet of Things, Pervasive computing, Sensor Networks, Ubiquitous computing.