Abstract

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A comparative analysis of localization algorithms for visible light communication

Improvement of Visible Light Communication (VLC) technology and the presence of the illumination encouraged the researches to research in VLC-based indoor positioning. Recently, researchers published several papers on VLC based localization systems, however there are not a lot of survey papers in this issue. In this paper, a deep analysis survey of VLC based localization systems is introduced. Researches from pioneering papers to the state-of-the-art in the field of VLC based position are analyzed and classified based on the localization techniques, types of transmitters and receivers, and multiplexing techniques. Different from other surveys, we analyze the accuracy of VLC based localization system in the practical and simulation environments.