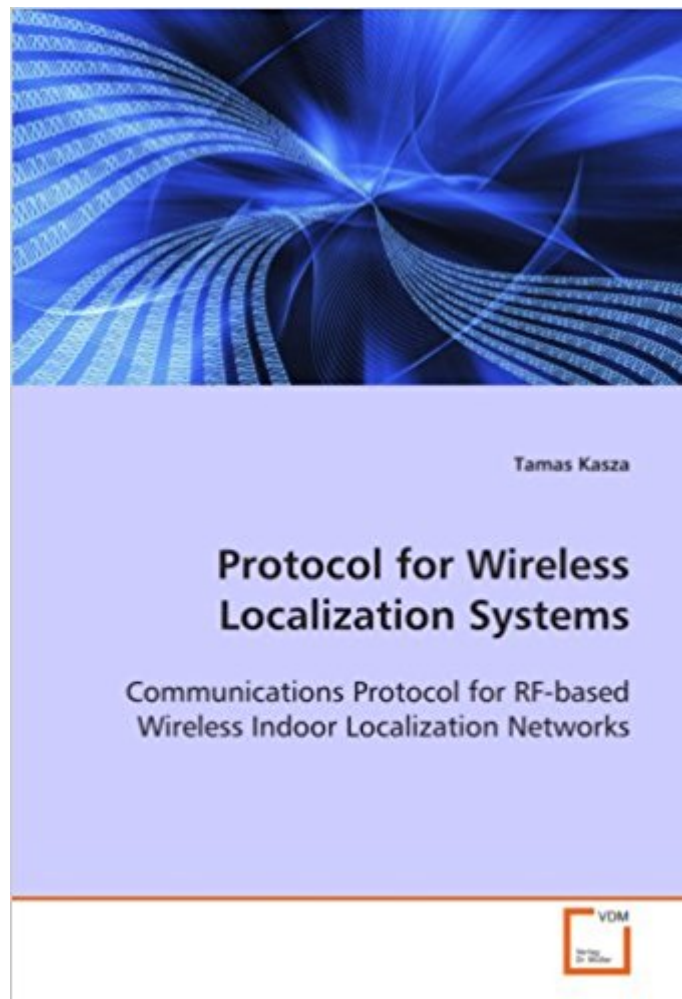The book was found

Protocol For Wireless Localization Systems: Communications Protocol For RF-based Wireless Indoor Localization Networks

Tamas Kasza

Protocol for Wireless Localization Systems

Communications Protocol for RF-based
Wireless Indoor Localization Networks

VDM

Synopsis

This book presents a new novel communications scheme for application-specific RF-based wireless indoor localization systems. In such a system, wireless badges attached to people or devices send periodical Received Signal Strength Indicator (RSSI) bytes at several selected frequencies to wireless router units. Routers measure RSSI and route information hop-by-hop toward a Central Management Station (CMS). In this many-to-one data communications network, CMS receives data entries of a badge and calculates positions at a desired level of accuracy. The new Wireless Indoor Localization System Protocol (WILSP) specifies a mixed time and frequency division (TDMA/FDMA) for medium access. Assuming the limited capabilities of Chipcon CC1010EM chips, results indicate that WILSP performs well in grid-, linear-structure and Cafeteria scenarios and the multi-hop scheme introduced meets the specified requirements. The investigation should be especially useful to professionals in Communications Protocols and Wireless and Localization Network experts, or anyone else who may be considering utilizing the latest advancements in electronics and technology for wireless localizations efforts.

Book Information

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