Rethinking of Feature Selection Method for Room-Level Localization using Public APs

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Abstract—As WiFi infrastructures and smartphones are propagated widely various WiFi fingerprint-based indoor localization system has been proposed. One of the approaches to improve the accuracy is the feature selection method that analyse the characteristics of WiFi RSSI and construct fingerprint database. However, none of the previous studies analysed about the number of features selected despite the fact that it is important in practical system. In this paper, we propose the feature selection method with characteristics of constancy and strength and evaluate the performance according to the number of features selected.

Keyword—Indoor Localization, WiFi Fingerprint, Feature Selection, Public APs, RSSI



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