Architecture of Image Feature DB Storage for Mobile Visual Localization

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***Abstract*—Location-based services (LBS) are becoming increasingly popular. Particularly, indoor mobile localization methods that use GPS or wireless signals have problem of accuracy yet. This article presents a novel system to mobile visual localization according to a given image associated with a variety of wireless signals in indoor environment. Recently structure from motion (SfM) approaches enable to create 3D models of scenes. These reconstructed sparse 3D-point clouds can then be used for accurate image-based localization by 3D-to-2D feature matching from database. Our proposed structure of storage in database is able to efficiently handle such large amounts of image feature data.**

***Keyword*— Location-based services (LBS), visual localization, indoor localization, database, wireless fingerprint**

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