CONTENT−BASED IMAGE INDEXING AND RETRIEVAL FRAMEWORK ON SYMBIAN BASED MOBILE PLATFORM (ThuPmPO1)

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Abstract : This paper presents a content−based multimedia indexing and retrieval framework designed for mobile platforms running Symbian−based operating system. It is mainly developed by focusing on mobile platform restrictions and Symbian features. The proposed framework is built on a client–server architecture, where the client side basically consists of the user interface and controllers, and the server is responsible for performing main functions. Both the client and the server may run on either the same mobile device, or separately on connected devices. A sample content−based image indexing and retrieval application running on single Nokia 6630 device is implemented for testing the framework, verify its feasibility, and study further directions in the area. The implemented application provides mobile indexing and retrieval features as well as instant image capturing with onboard camera for queries. The experimental studies reveal relatively successful results in terms of semantic and process performance.