Abstract:
The prototype of an image retrieval system for mobile guide applications used for urban scenes. It allows users to send image queries using camera phones. The system uses a database of views of scenes to determine the poses of query views provided by the users. Information are then mapped onto the query views. Our approach is based on a fully affine invariant descriptor, coined PRIUS, which can identify corresponding building facades across widely separated views despite the highly repetitive nature of the man-made environments. The system is substantiated by experiments which show that our approach outperforms the state-of-the-art approaches such as SIFT and MSER in image retrieval.