

TPA 10: Online CBIR Tool to Work Indoor for a Large Category of Hand-held and Personal items

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Problem Statement: Content-Based Image Retrieval (CBIR), also known as Query By Image Content (QBIC), is the application of Computer Vision to the image retrieval problem. The aim of the project is to search and retrieve digital images in large databases, with an online interface (for live demo).

Input: An image of hand-held object.

Output: Rank ordered set of retrieved images.

Dataset:

- **VP Lab Hand-held Objects Dataset:** The dataset contains photos of 20 object types, with a total of 500 images (may be expanded with other hand-held or indoor objects).

References:

1. Nitin Gupta, Sukhendu Das and Sutanu Chakraborti, Extracting Information from a Query Image, for Content Based Image Retrieval, in ICAPR, 2015.
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3. Pedro F. Felzenszwalb, Ross B. Girshick, David McAllester and Deva Ramanan, Object Detection with Discriminatively Trained Part Based Models, in IEEE TPAMI, vol. 32, 2010.
4. Liu, Haomiao, Ruiping Wang, Shiguang Shan, and Xilin Chen, "Deep supervised hashing for fast image retrieval", in IEEE CVPR, 2016.