**Paper title:** Appearance-Based Object Recognition Using Weighted Longest Increasing Subsequence

**Abstract:**
We proposed in this paper a novel weighted longest increasing subsequence to improve the performance of the appearance-based object recognition. The LIS is employed to find the true keypoint matches that have consistent geometric order in both query and gallery images. Then, the similarity between query and gallery images is measured by the sum of the weights of the true keypoints. The experimental results shown that our approach outperforms the SURF and SURF + RANSAC Homography approaches.