



School of Electrical Engineering and Computer Science
Department of Electrical Engineering

EE-877

Mobile Robotics (MSEE – AI&AS)
Assignement 2

Fall-2024

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Max. Points: 10
Evaluation: Thu Dec 05, 2024

Q: You are required to write a ROS/python/opencv code that takes a query image, and a database of images (folder) as input, and outputs the number of feature matches of the best match of the query image from the database. Use following methodology:

- The function should give option to use one of the three features: SIFT, SURF, Harris Corner.
 - SIFT descriptor should be used for all features.
 - Use RANSAC verification to eliminate bad matches.
 - The best match would be the image with highest number of feature matches. You can place an appropriate threshold on number of matches, and output 'No match found' in case the number of features matches are below the threshold.
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