CS 763/764: Computer Vision

Reflection Essay

1. Part A

This assignment was based on key-point detection and matching. The first part was based on key-point detection and description using a combination of the different detectors and descriptors taught in the class. The detectors used were DOG from SIFT algorithm, FAST from orb implementation. The descriptors used were SIFT and BRIEF.

2. Part B

The second part of the assignment had a more realistic and practical implementation. The objective was to create a surveliance system that can figure out if an intruder exists in the provided database or not. For this we used a metric which compares the similarity of the detected key points between the intruder images and the images present in the provided database. We had the option of varying the amount of masking to determine the feasibility and the scope of key-point detection algorithms for this purpose.

It was a challenging assignment due to the open ended nature of the questions providing variability in implementation methods.