

Digital Forensics Lab-II

Spring 2020

Assignment 3

Points: 100

Deadline of Submission: 07-02-2020 (4:30 PM)

Implementation of RESIDUAL-BASED FORENSIC COMPARISON OF VIDEO SEQUENCES. The paper proposes a method to compare two video sequences. It finds out the matching of source cameras and content modification (if exists).

P. Mullan, D. Cozzolino, L. Verdoliva and C. Riess, "Residual-based forensic comparison of video sequences," *2017 IEEE International Conference on Image Processing (ICIP)*, Beijing, 2017, pp. 1507-1511.

Go through the paper and implement the statistical descriptors as mentioned in Section 2.1. Using this statistical descriptor as the feature, find the Mahalanobis distance between the two feature vectors computed from two video sequences. Find out the similarity index as discussed in Section 2.2.

Create a dataset as presented in Section 3.1 and Section 3.2 and produce the results shown in Figure 4.