CMSE492 Seminar 29.04.2019 Task on RS Steganalysis

1. Consıder two masks, 1x4 mask M1=(0,1,1,0), and 2x2 mask, M2=(1,0; 0, 1)
2. Consider the grayscale image, I, below having 2 rows and 8 columns:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Col1 | Col2 | Col3 | Col4 | Col5 | Col6 | Col7 | Col8 |
| Row1 | 10 | 205 | 101 | 11 | 12 | 23 | 28 | 121 |
| Row2 | 255 | 235 | 193 | 221 | 207 | 121 | 170 | 211 |

1. Specify 4 pixel groups, G11,..,G14, for M1, and 4 pixel groups, G21, .., G24, for M2
2. Classify the groups as RM1, SM1, R-M1, S-M1, UM1, U-M1, and RM2, SM2, R-M2, S-M2, UM2, U-M2
3. Using 5% threshold, decide on the image, I, whether it has (not) a payload according to M1 and according to M2
4. Bring your homework showing details of your work to the seminar
5. Your homework and participation in the seminar will be graded (50% +50%)