

LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	0.0000	0.0000
590	0.0002	0.0002
5274	0.0019	0.0018
27837	0.0975	0.0095

**MEAN  
SQUARED  
ERROR**

LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	99.0920	98.9612
590	78.6749	78.6352
5274	68.8499	69.0196
27837	61.7314	61.8092

**SIGNAL TO  
NOISE RATIO**

LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	105.6455	105.4717
590	85.2283	85.1907
5274	75.4034	75.5751
27837	68.2649	68.3647

**PEAK-SIGNAL  
TO NOISE  
RATION**



LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	0.0001	0.0001
590	0.0073	0.0061
5274	0.0711	0.0574
27837	0.3188	0.2924

**MEAN  
SQUARED  
ERROR**

LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	87.2962	87.4730
590	67.7907	68.7516
5274	57.9277	59.0339
27837	51.5092	51.9572

**SIGNAL TO  
NOISE RATIO**

LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	88.9824	88.9824
590	69.4769	70.2611
5274	59.6139	60.5442
27837	53.0954	53.4707

**PEAK-SIGNAL  
TO NOISE  
RATION**



LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	0.0000	0.0000
590	0.0038	0.0036
5274	0.0349	0.0343
27837	0.1845	0.1811

**MEAN  
SQUARED  
ERROR**




LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	86.7174	87.8083
590	66.6528	66.9243
5274	57.0276	57.1054
27837	49.7978	49.8774

**SIGNAL TO  
NOISE RATIO**

LENGTH OF CHARACTERS	OLD ALGORITHM	NEW ALGORITHM
5	92.3905	93.4819
590	72.3258	72.5980
5274	62.7006	62.7785
27837	55.4708	55.5525

**PEAK-SIGNAL  
TO NOISE  
RATION**



Cover Image	Format	PIXEL SIZE
	JPG	3840 X 2400
	PNG	640 X 640
	JFIF	600 X 800

### Old algorithm:

In this algorithm the embedded bits are concentrated in a same area, since only after the space in first layer is exhausted the next layer is used for embedding. therefore it can easily be detected

### New algorithm:

The pixels in all layers are considered a vector after which the vector is split into 8 sections, the embedding of bits are chosen random from these 8 sections therefore making the embedding much spread and random throughout the image.

### Inference Made:

By comparing the two values recorded. We can infer that the new algorithm produces much desirable values for the RMS and SNR and PSNR. Thus showing that distributed embedded bits are much desirable and also the position of the embedded bits also affect the quality of hiding in steganography.

### Further Works:

1. Encrypting the text before pre processing
2. Comparing the values of the embedded encrypted texts
3. Further progress in the documentation.