

Desafío 4: Estenografía

Extracción de una marca invisible de lena en la imagen de piedras.



Código

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```
piedrasMarcadas = imread("piedrasMarcadas.png");
piedras_gris = rgb2gray(piedrasMarcadas);
[f,c]=size(piedras_gris);
i=1
figure
ln2 = [128.7 128.8 128.9 129] % ir modificando la lista de pixeles hasta encontrar el óptimo
leps = [7 8 9 10 11 12] % ir modificando la lista de posibles eps hasta encontrar el óptimo
for n2 = ln2
    for eps = leps
        y2 = dct2(piedras_gris)
        y2 = y2(f-n2+1:f,c-n2+1:c)/eps
        y2 = idct2(y2)
        subplot(size(ln2,2),size(leps,2),i), imshow(y2), title(['n2: ',num2str(n2),'', eps: ',num2str(eps)])
        i=i+1
    end
end
```



Función
extraermarca

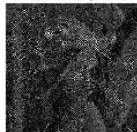
Resultados

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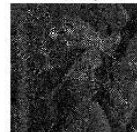
n2: 128, eps: 7



n2: 128, eps: 8



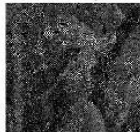
n2: 128, eps: 9



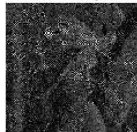
n2: 128, eps: 10



n2: 128.2, eps: 7



n2: 128.2, eps: 8



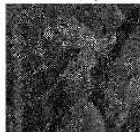
n2: 128.2, eps: 9



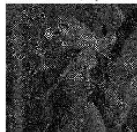
n2: 128.2, eps: 10



n2: 128.3, eps: 7



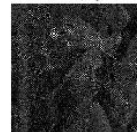
n2: 128.3, eps: 8



n2: 128.3, eps: 9



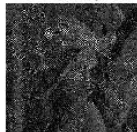
n2: 128.3, eps: 10



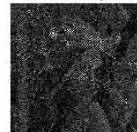
n2: 128.4, eps: 7



n2: 128.4, eps: 8



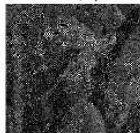
n2: 128.4, eps: 9



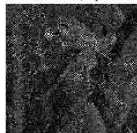
n2: 128.4, eps: 10



n2: 128.5, eps: 7



n2: 128.5, eps: 8



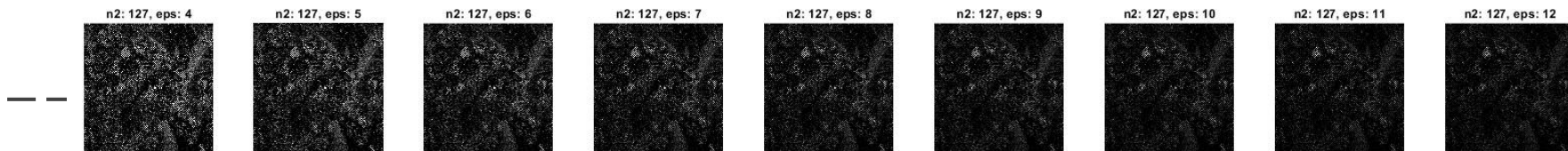
n2: 128.5, eps: 9



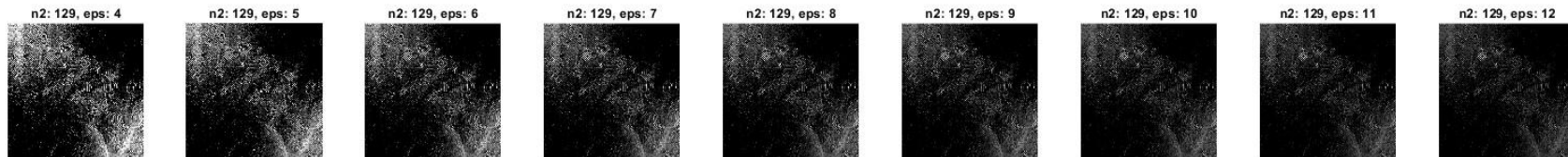
n2: 128.5, eps: 10



Primeras pruebas



Vemos que por aquí van los tiros ...



Resultado final

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n2: 128.3, eps: 9

