src\metrics.py

```python
import numpy as np
from skimage.metrics import structural_similarity as ssim
import math

def psnr_uint8(img1, img2):
    mse = np.mean((img1.astype(np.float64) - img2.astype(np.float64))**2)
    if mse == 0:
        return float('inf')
    PIXEL_MAX = 255.0
    return 20 * math.log10(PIXEL_MAX / math.sqrt(mse))

def ssim_uint8(img1, img2):
    return ssim(img1, img2, data_range=255)

def embedding_rate(payload_bits, cover_pixels):
    return round(payload_bits / cover_pixels, 4)

def rs_analysis(img):
    img = img.astype(np.uint8)
    flipped = img ^ 1
    diff = np.mean(np.abs(img.astype(np.int16) - flipped.astype(np.int16)))
    return round(diff / 255.0, 4)
```