**Calculate Reconstruction Error in the red channel**

1. Use our trained autoencoder to generate reconstructed patches from the cropped images
2. Calculate the error in the red channel (HSV space) between original and reconstructed images
3. Apply the formula for Fred, which will quantify the deviation in the red channel after reconstruction.

**Threshold on the error function to detect anomalies**

* Ther error function serves as anomaly detector, where errors above a threshold indicate the presence of Hpilory

Error > Th -> Hpilory

* Implement ROC adaptive thresholding to find the optimal threshold based on annotated patches
* This threshold should be the point on the ROC curve closest to (0,1) which represents a perfect classification with FPR=0 and TPR=100%

**Create ROC and find optimal threshold**

* Use the annotated data to construct the ROC curve
* The labels in the annotated dataset will guide the selection of the threshold for reconstruction error function

1. Compute the reconstruction error
2. Apply adaptive thresholding
3. Evaluate the ROC Curve

Texto

Descripción generada automáticamente