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SynChallenge Methods Writeup

In the `SynChallenge` analysis of images for synapse identification, I implemented a few features in order to increase the F-score and therefore accuracy of classification. First, on top of the two given features of percentile intensity and contrast, I added the standard deviation of intensity as a feature by calling the `std` function from the `NumPy` module. I had hoped that perhaps a synapse would have a greater standard deviation of intensity than non-synapse, and the F-score did increase, although only by 0.01. Next I turned to functions from the `feature` submodule of `skimage`. Implementing the `daisy` function, an algorithm developed to rapidly analyze image depth and density, greatly increased the classifier's efficacy. The final F-score achieved was 0.92.