

# Quantifying Images

```
def quantify_image(image):
    features = feature.hog(image, orientations=9, pixels_per_cell=(13, 13), cells_per_block=(4, 4), transform_sqrt=True,
    block_norm="L1")
    return features

def load_split(path):
    imagePath = list(paths.list_images(path))
    data = []
    labels = []

    for imagePath in imagePath:
        image = cv2.imread(imagePath)
        label = imagePath.split(os.path.sep)[-2]
        image = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
        image = cv2.resize(image, (200, 200))
        image = cv2.threshold (image, 0, 255,
        cv2.THRESH_BINARY_INV | cv2.THRESH_OTSU) [1]
        features = quantify_image(image)
        data.append(features)
        labels.append(label)
    return (np.array(data), np.array(labels))
```