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In [26]: from PIL import Image

def get_exif(filename):
    image = Image.open(filename)
    image.verify()
    return image._getexif()

exif = get_exif('IX-11-01917_0004_0001.JPG')
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In [31]: dict(list(exif.items())[0:25])
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Out[31]: {36864: b'0230',
37378: 4.97,
36867: '2018:09:02 05:23:42',
37380: 0.0,
37381: 2.97,
37382: 4294967.295,
37383: 1,
37384: 9,
37385: 16,
37386: 18.5,
40962: 6000,
40963: 4000,
41483: nan,
41486: 2558.0,
41487: 2558.0,
41488: 3,
37521: '\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00',
11: 'eMotion 3.7.0b2',
271: 'senseFly',
272: 'senseFly Aeria X',
50708: 'senseFly Aeria X',
33434: 0.0005,
282: 72.0,
283: 72.0,
33437: 5.6}
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In [29]: from PIL.ExifTags import TAGS

def get_labeled_exif(exif):
    labeled = {}
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    for (key, val) in exif.items():
        labeled[TAGS.get(key)] = val

    return labeled

exif = get_exif('IX-11-01917_0004_0001.JPG')
labeled = get_labeled_exif(exif)

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In [30]: dict(list(labeled.items())[0:20])
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Out[30]: {'ExifVersion': b'0230',
'ApertureValue': 4.97,
'DateTimeOriginal': '2018:09:02 05:23:42',
'ExposureBiasValue': 0.0,
'MaxApertureValue': 2.97,
'SubjectDistance': 4294967.295,
'MeteringMode': 1,
'LightSource': 9,
'Flash': 16,
'FocalLength': 18.5,
'ExifImageWidth': 6000,
'ExifImageHeight': 4000,
'FlashEnergy': nan,
'FocalPlaneXResolution': 2558.0,
'FocalPlaneYResolution': 2558.0,
'FocalPlaneResolutionUnit': 3,
'SubsecTimeOriginal': '00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00',
'ProcessingSoftware': 'eMotion 3.7.0b2',
'Make': 'senseFly',
'Model': 'senseFly Aeria X'}

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In [4]: from PIL.ExifTags import GPSTAGS

def get_geotagging(exif):
    if not exif:
        raise ValueError("No EXIF metadata found")

    geotagging = {}
    for (idx, tag) in TAGS.items():
        if tag == 'GPSInfo':
            if idx not in exif:
                raise ValueError("No EXIF geotagging found")

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        for (key, val) in GPSTAGS.items():
            if key in exif[idx]:
                geotagging[val] = exif[idx][key]

    return geotagging

exif = get_exif('IX-11-01917_0004_0001.JPG')
geotags = get_geotagging(exif)
print(geotags)

{'GPSVersionID': b'\x02\x03\x00\x00', 'GPSLatitudeRef': 'N', 'GPSLatitude': (14.0, 3.0, 52.645639), 'GPSLongitudeRef': 'E', 'GPSLongitude': (100.0, 37.0, 5.068784), 'GPSAltitudeRef': b'\x00', 'GPSAltitude': 254.834, 'GPSTimeStamp': (5.0, 23.0, 43.139), 'GPSStatus': 'A', 'GPSMapDatum': 'WGS-84\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00\x00', 'GPSDateStamp': '2018:09:02'}

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In [7]: def get_decimal_from_dms(dms, ref):

    degrees = dms[0]
    minutes = dms[1] / 60.0
    seconds = dms[2] / 3600.0

    if ref in ['S', 'W']:
        degrees = -degrees
        minutes = -minutes
        seconds = -seconds

    return round(degrees + minutes + seconds, 5)

def get_coordinates(geotags):
    lat = get_decimal_from_dms(geotags['GPSLatitude'], geotags['GPSLatitudeRef'])

    lon = get_decimal_from_dms(geotags['GPSLongitude'], geotags['GPSLongitudeRef'])

    return (lat, lon)

exif = get_exif('IX-11-01917_0004_0001.JPG')
geotags = get_geotagging(exif)
print(get_coordinates(geotags))

(14.06462, 100.61807)

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In [12]: import sys

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from PIL import Image

for filename in sys.argv[1:]:
    print(filename)

    image = Image.open('IX-11-01917_0004_0001.JPG')
    image_clean = Image.new(image.mode, image.size)
    image_clean.putdata(list(image.getdata()))
    image_clean.save('clean_' + 'IX-11-01917_0004_0001.JPG')
```

-f

C:\Users\rutuj\AppData\Roaming\jupyter\runtime\kernel-418b2ae1-fb69-4f5b-a128-e9d3c0798932.json