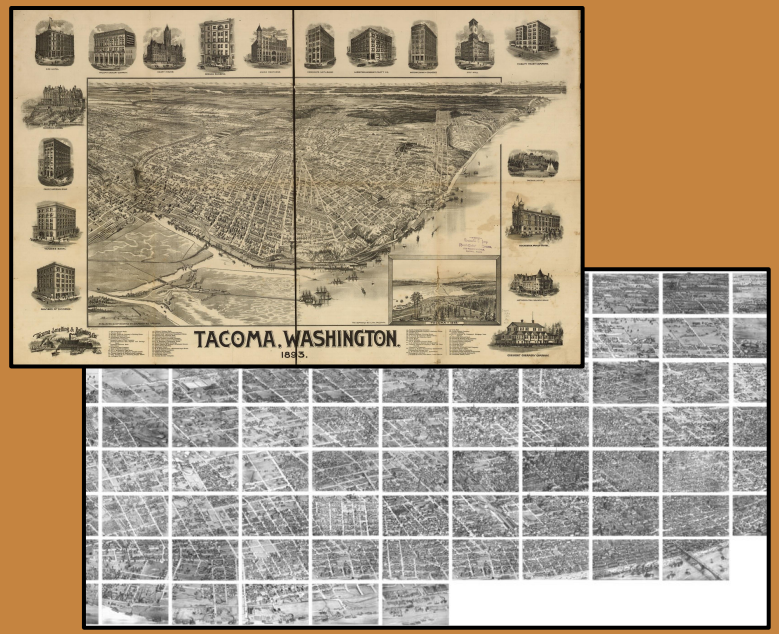
Using Python to Connect People to Nature

Static >>> to >>> Interactive

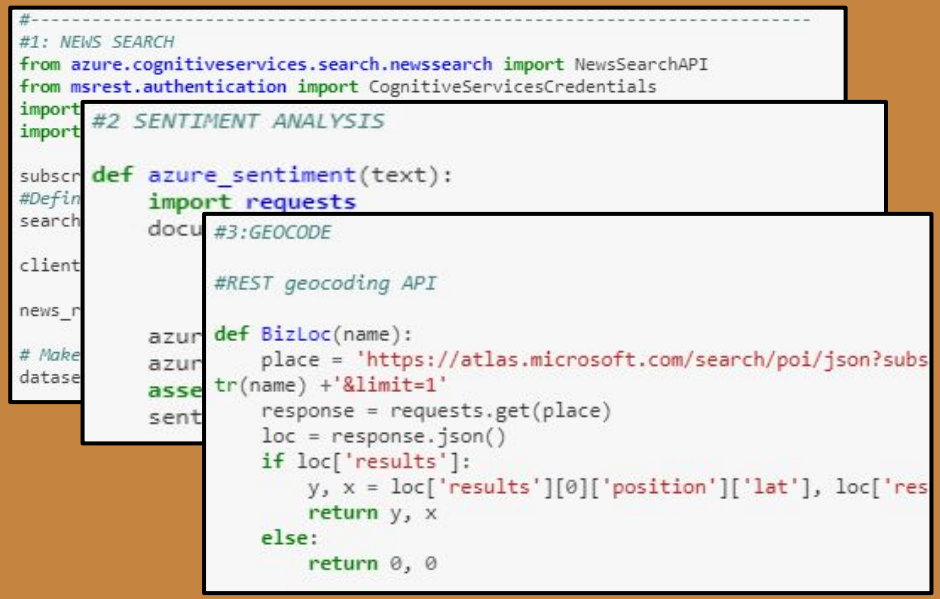


Goal: Take large static images, create map tiles with python.

Input - static images (JPEG, TIFF, PNG)
Output - map tiles

```
import os, gdal

in_path = 'C:/Users/Amy/Desktop/MSGT_19/501_Final'
input_filename = 'tacoma1893'

out_path = 'C:/Users/Amy/Desktop/MSGT_19/501_Final/output'
output_filename = 'maptileTac'

tile_size_x = 50
tile_size_y = 70

ds = gdal.Open(in_path + input_filename)
band = ds.GetRasterBand(1)
xsize = band.XSize
ysize = band.YSize

for i in range(0, xsize, tile_size_x):
    for j in range(0, ysize, tile_size_y):
        com_string = "gdal_translate -of GTIFF -srcwin " + s
        os.system(com_string)
```

What are people saying about nature?



```
#----------------------------------------------------------------------------
#1: NEWS SEARCH
from azure.cognitiveservices.search.newssearch import NewsSearchAPI
from msrest.authentication import CognitiveServicesCredentials
import
import

subscr
#Defin
search

client

news_r

# Make
datase
```

```
#2 SENTIMENT ANALYSIS

def azure_sentiment(text):
    import requests
    docu

    azur
    azur
    asse
    sent
```

```
#3:GEOCODE

#REST geocoding API

def BizLoc(name):
    place = 'https://atlas.microsoft.com/search/poi/json?subs
tr(name) +'&limit=1'
    response = requests.get(place)
    loc = response.json()
    if loc['results']:
        y, x = loc['results'][0]['position']['lat'], loc['res
        return y, x
    else:
        return 0, 0
```

What are people saying about nature?

Goal: Using local newstories to see what people are saying about nature, from 1980-current.

The results of the map tile will be incorporated into an interactive visualization and the data collected from the sentiment analyse will show how people are talking about open green spaces, and natural areas.