In [4]:

```python
import pandas as pd
from scipy import stats
import plotly.express as px
import matplotlib
import math
poi_gpd=pd.read_pickle('C:\\Users\\44568\\Desktop\csh.pkl')  #读取已经存储为.pkl格式的POI数据，其中包
poi_gpd.plot(marker=".",markersize=5)
poi_coordinates=poi_gpd[['location_lng','location_lat']].to_numpy().T  #根据stats.gaussian_kde()输入
poi_coordi_kernel=stats.gaussian_kde(poi_coordinates) #核密度估计
poi_gpd['poi_kde']=poi_coordi_kernel(poi_coordinates)
poi_gpd.shopinfo=poi_gpd.shopinfo.fillna(0)
mapbox_token='pk.eyJ1IjoicmljaGllYmFvIiwiYSI6ImNrYjB3N2NyMzB1MG8yc254dTRzNnMyMyHMifQ.QT7MdjQKs9Y6OtaJ
px.set_mapbox_access_token(mapbox_token)
fig=px.scatter_mapbox(poi_gpd,lat=poi_gpd.location_lat, lon=poi_gpd.location_lng,color='poi_kde',co

fig.show()
poi_gpd.head()
```


In [ ]:

```python
import pandas
```