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Abstract

Nowadays, there are many researches on the analysis of Geosocial big data, such as geotweeet and as foursquare venues and OSS(Open Source Software) has an important role on this. In the analyzing geosocial big data, there are several different steps such as data collection, data parsing, data conversion, statistical analysis, visualizing and database management. So, the integrated system architecture and the compatible analysis environment has a key role to acquire the relevant analysis results. The Python programming support the interoperable analysis environment for the various and different software functions and enable to process for geosocial big data in the integrated platforms. FOSS4G support software environment for geovisualization and data management for the collected data. In this study, the way and process of geosocial big data analysis is introduced with case study of geotweet and foursquare venues and the analysis results are presented with the case study of Korean data. For this study, Python API libraries for tweeter(tweepy) and foursquare(pyforsquare) used to collect the geosocial data, and Pandas and Simplejson are used to parse and extract the valid data, and GDAL and PySAL are used to convert and analyze for GIS data. PyTagCloud and WordCloud are used to visualize the qualitative text. MongoDB is used to store the collected dataset and QGIS are applied for the geovisualization.

Academic Discipline and Sub-Disciplines : geosocial big data; python; FOSS4G

Keywords : geosocial big data; python; FOSS4G