COS787 – Spatial databases

Assignment 3: MongoDB
Due Date: 3 May 2019 (Friday)

Instructions:

You can complete the assignment as an individual or in a group of two.

For this assignment, you have to create tutorial to showcase the spatial functionalities of MongoDB and MongoDB Compass.

Your tutorial should comply with the following requirements:

- The tutorial should introduce NoSQL and MongoDB with reference to recent scientific articles.
- The tutorial can be either written or visual.
- The tutorial should make use of any open dataset to demonstrate the spatial functionalities.
- You need to include the scripts used to generate the examples.

The tutorial should at least address the following aspects of the spatial aspects of MongoDB:

- Loading spatial data
- Indexing
- Basic selections
- Finding features in a given bounding box
- Intersections
- Selecting features based on their distance from another feature
- Any additional queries possible or JavaScript libraries

Marks will be given based on the following:

i.   Completeness
ii. Correctness
iii. Creativity
iv. Usefulness
v.   Overall impression