Project Deliverable P1

This is the first deliverable to submit for course projects. The goal is to identify an appropriate project topic and available datasets. Please provide a description of project title, problem description, and available datasets as instructed below. It is required to discuss the topic with the instructor in office hours to decide the project topic together in order to get grade for homework P1! (Some candidate topics are available at link [1]. You are encouraged to suggest your own topics as well.)

Project title (less than 20 words): A good project title will indicate what problem is being addressed and what general approach is being used. For example, in the title Decision Tree Classification of Land Cover from Remotely Sensed Data, both the problem (classification of land cover) and the approach (decision tree) are covered. If possible, find a catchy project title.

Problem description (within 100 words): Please describe what the problem is being solved in your project. What are the inputs and outputs in your problem? In the example above, the problem inputs include spatial raster data (remotely sensed imagery) and ground truth land cover classes, and the problem outputs include a decision tree classification model and its predictions on unlabeled pixels.

Societal applications (within 100 words): Please describe what are the broader societal benefits of your project. Will it help make people’s life easier? Will it help save people’s life after a disaster? Please provide specific examples.

Datasets (within 100 words): Please clearly describe the real world datasets you will use for your projects. Please make sure the dataset your will use is readily available for your use. Description on a dataset that does not exist or is not accessible will be considered as invalid. Dataset descriptions should include:
1. Data source with a URL
2. All attributes (e.g., columns of a data table)
3. Ground truth (class labels or continuous response) if applicable
4. Dataset size (number of samples or records)
5. Some visualization or snapshot on the data

Reference:
[1]: Some candidate project topics (continuously being updated):
http://zhejiang.cs.ua.edu/Teaching/Spring17/SpatialBigData/homework/ProjectTopics2.txt