

# Final Project for GEOG-479

## Guideline for final project:

We are coming to an end of the course GEOG-479. For the final project of this course (40% of the total score), students can freely choose any topic of interest to investigate. The final product of the project will be submitted as a formal research report. For example, students can choose same topic for their mid-term proposal or new topics that are gradually formed during the lectures and labs. The report should address the following aspects: *what is the topic you are studying, why it is important/interesting to others, what kind of data you are using, what are the challenges, and how you proposal to address them, finally, what are steps for you to implement.*

## Requirements:

The dataset used for this project is up to the students. However, if students are interested in using Twitter datasets (or other social media data, such as <https://snap.stanford.edu/data/index.html>) and New York Taxi datasets, as well as geographic boundary data, the lecturer of this course will provide assistance to prepare such data upon request.

This project **MUST** involve the computational resources provided by ROGER, whether high-performance computing via HPC and PBS job submission, MapReduce (with Python) on Hadoop, or Spark. This project report will be *minimum 3 pages*.

## Suggested content:

Each student will choose a topic, however, teamwork is also allowed (with maximum 2 people in a group). Teamwork report will be *minimum 4 pages*. While there is a requirement for the number of pages of the report, students should construct the structure of the report with good logic flows and visualizations for simplicity, if possible.

Students can focus on one or two aspects their topic to conduct the final project, whether it is addressing data intensive problems, visualization, correlation analysis among two/multiple Big Data sources.

If there is any problem, please do not hesitate to contact Junjun Yin ([jyn@illinois.edu](mailto:jyn@illinois.edu)).

**Deadline:** Submission is due **12:00 pm, May 15, 2016**