Spring 2015 -- Seminar Announcement

Geospatial Data Analysis

CSCI 4830/7000 - Special Topics in Computer Science

T/TH 6:30-7:45 in the Engineering Center, ECCR 1B08

Calling all map nerds, armchair cartographers, and geodata researchers! This course will introduce nuts and bolts analysis methods and programmatic skills for investigating large spatial datasets. We will survey state of the art geospatial research from a variety of fields and applications. Likely topics:

- GIS data formats, projections, and geospatial data management
- GIS Programming and tools for leveraging open data
- Spatial statistics and models for prediction and interpolation
- Spatial sampling and optimized sampling in space
- Methods for large scale parallel analysis
- Visualization tools and techniques

Additional topics will be selected based on student interest. Readings, discussions, and introductory projects in the first half of the class will give way to self-directed individual projects in the latter half. **Doctoral students** who want to apply quantitative analysis to their geography-relevant research questions are encouraged to enroll. **Geography students** with computational curiosities are similarly encouraged to enroll.

Instructor: Caleb Phillips <caleb.phillips@colorado.edu>
Pre-reqs: some programming experience, comfort with math/stats concepts, and/or instructor discretion