# Tools for open geospatial science

Make your science stronger by making it transparent and reproducible.

New course, Fall 2017 GIS 610-003 and -603 On campus and Distance

#### The course will:

- focus on open science and reproducibility of geospatial analyses,
- use geospatial open source tools,
- introduce general-purpose and text authoring tools,
- and uncover mysteries of open source.

### The students will:

- understand the emerging field of open science,
- gain hands-on experience with variety of open source tools,
- try tools used useful in science and heavily used in industry,
- and see how to use the same approaches in their own research. Why to take it?

### Why to take it?

- I want my computations validated by other researchers.
- I want my research to be reused by a wider community.
- I want to learn about science, but also gain knowledge marketable in industry.

## Why not to take it?

- I don't like other people using my research because only I understand it.
- I don't want people finding mistakes in my calculations.
- I like to send my documents through email with names like joes corrections FINAL 3.

Some of the software covered: Jupyter Notebook, QGIS, Markdown, Authorea, Linux, Git, Overleaf, GRASS GIS, GDAL, Leaflet, Docker



Lecture combined with hands-on exercise which overlaps with a short homework

Distance or Wed 3:00pm - 4:50pm (110 min), Jordan Hall 5119, S/U, 1 credit

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