

# REVIEW SESSION



**Gengchen Mai**

**GEOG 176C**

**Spring 2016**

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# What we have learned?



Date	Topic	Text Chapter	Assignment
03/28/16	Class Objectives, Overview, and Ideas		Prepare lightning talk
03/30/16	Geo-Data, VGI, and Applications		
04/04/16	Lightning talks		Lightning talk due
04/06/16	Data Entry and Editing	4	Join/form a group
04/11/16	The Internet as Application Platform		
04/13/16	GeoWeb and Spatial Data Infrastructures	14	Prepare proposal
04/18/16	The Internet as Application Platform		
04/20/16	Library Data (GS)		Prepare proposal talk
04/25/16	Proposals (1)		Proposal & talk due
04/27/16	Proposals (2)		Proposal talk due
05/02/16	Proposals (3)		
05/04/16	Simple Scripting on the GeoWeb		
05/09/16	Using Social Media in GIS/GIScience (GS)		
05/11/16	GIS for Disaster Relief (GS)		Prepare final report
05/16/16	Geo-Cloud Computing (GS)		
05/18/16	The Future of GIS / GIScience	15	
05/23/16	Final presentations (1)		
05/25/16	Final presentations (2)		Prepare final presentation
05/30/16	Holidays		Final presentation due
06/01/16	Final presentations (3)		Final presentation due
06/02/16	spatial@ucsb.local2016 (optional)		Final report due / poster due

# What we have learned?



- How the data are generated?
- authoritative data sources: government own data sets (USGS), data.org
- user generated data: OpenStreetMap (Download data from QGIS)
- Data Entry:
  - Map scanning: edge detection; differentiate text from feature; (Imaging processing)
  - Digitizing: Digitizing Error (projection?)

# What we have learned?



- How to share and access the data through internet? (IMPORTANT!)
- The origination of Internet or World Wide Web
  - HyperText Markup Language (HTML)/ Geography Markup Language (GML)
- GeoWeb
  - Service Oriented Architectures
  - Software As A Service (SaaS) Web Feature Service (WFS)
  - Publish, Find, Bind Pattern
  - Cloud Computing
  - OGC's Spatial Data Infrastructures

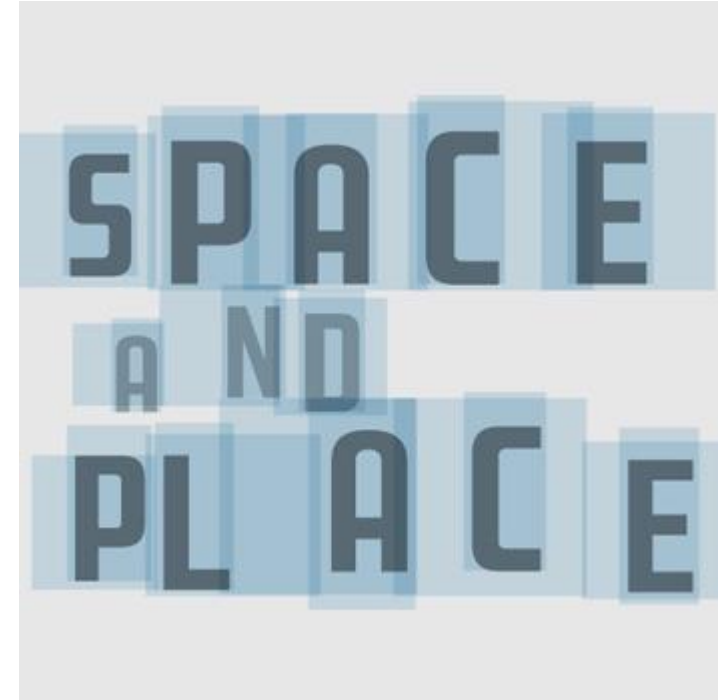
# What we have learned?



- GIS and Spatial analysis
- Vector data processing: Spatial join, Buffer,
- Raster data processing: Map algebra, proximity map, image convolution
- Vector-raster data interoperation: Extract multi-value to points, zonal statistic
- Regression and Spatial Regression

# What we have learned?

- The future of GIS
- Just briefly review some concepts



# Take Home Message



- Congratulation to you for finishing your first GIS project
- Research is both difficult and rewarding
- Having a clear mind about what you want to solve and having a research methodology in your mind are better than beginning project in hurry
- You should not be just satisfied about what you have done. The most important part is why we want to do this, why we use this methodology not another one.
- There are more than one way to solve a research question. That is the cool part of science. So I hope my instruction does not limit your creativity.
- Be a independent researcher instead of a dependent assistant

Good Job

**THANK YOU FOR YOUR HARD WORKING!**

