SCHOLARS' LAB

Spring 2013 GIS Workshops

Preregistration is not required. All sessions are free and open to the UVa and larger Charlottesville community. All sessions are one hour and assume attendees have no previous experience using GIS. Most of the sessions will be hands-on with step-by-step tutorials with expert assistance.

If you have any questions, please contact Scholars' Lab GIS Specialists Chris Gist (<u>dcg6b@virginia.edu</u>) or Kelly Johnston (<u>kgj3t@virginia.edu</u>).

Acquiring and Using US Census Data in GIS

Wednesday, **February 6** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **February 7** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

The United States Census has made big changes in their surveys and in the online tools to find and use US Census datasets. Join us for a hands-on session introducing the newly redesigned American Factfinder online tool for discovery and access to free data from the US Census. No experience working with US Census data or geographic information systems is required.

Defining Watersheds with Digital Elevation Data

Wednesday, **February 13** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **February 14** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

Want to know the extent of any watershed? This session will teach you the process of delineating any watershed in ArcGIS using elevation data.

Using Neatline

Wednesday, **February 20** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **February 21** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

Neatline is a set of plugins for Omeka developed by the Scholars' Lab. With this tool, anyone can create beautiful, complex maps and narrative sequences from collections of archives and artifacts, and to connect maps and narratives with timelines that are more-than-usually sensitive to ambiguity and nuance. See http://neatline.org/ for more information.

Making Cartograms

Wednesday, **February 27** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **February 28** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

A cartogram is a thematic map that uses area to represent something other than area. Imagine a map where country area represents population, or cancer rates. You will learn how to send a powerful message with this thematic technique.

Introduction to GDAL

Wednesday, **March 6** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **March 7** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

The Geospatial Data Abstraction Library is an open source utility library for raster geospatial data formats. As a library, it presents a large number of utilities to the calling application for all supported formats. It also comes with a variety of useful command line utilities for data translation and processing. We will focus on the command line utilities.

Do It Yourself Aerials

Wednesday, **March 20** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **March 21** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

We have three aerial platforms, balloon, kite and hexcopter. Come get an update from us and find out how to do your own aerial photography.

Introduction to Quantum GIS

Wednesday, **March 27** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **March 28** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

Quantum GIS (QGIS) is an open source, multi-platform GIS. While not nearly as powerful as ArcGIS, the 80/20 rule applies. Probably 80% of the things most users want to do with GIS can be done with QGIS. The session will introduce the interface and participants will make some nice maps. Learn more about QGIS at http://www.qgis.org.

Advanced Techniques with Quantum GIS

Wednesday, **April 3** 4:00 – 5:00pm Campbell Hall, Room 105

Session repeats on Thursday, **April 4** 3:00 – 4:00pm Alderman Library, Room 421 (Electronic Classroom)

One of QGIS's strengths is its ability to pull in various streaming open standard data services. We will pull some data in from a remote location and do some spatial analysis.