

# GEOCOMMONS: Mapping

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## What is Geocommons?

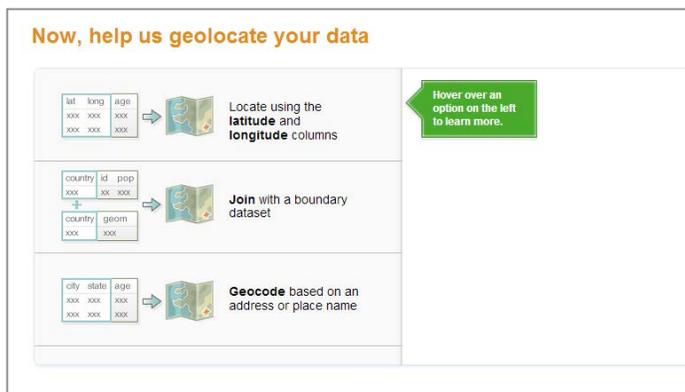
Geocommons is a data repository and visualization tool that utilizes maps to provide location focused visualizations, providing analysis that standard data visualization software would otherwise not be able to produce. With its convenient system of importing spreadsheets, its user friendly interface, and its access to a crowd-sourced database of existing datasets, Geocommons is a useful tool for data visualization and analysis.

## Getting Started

1. In the top right corner of the home page, select "Sign Up". Follow the prompt and create an account.
2. After creating an account, go to the home page. You should find a set of three buttons in the top right corner. Select Upload Data.
3. Remember that your dataset will require two fields for longitude and latitude; these coordinates allow for Geocommons to plot your data. Label these fields *lat* and *lon*.

## Uploading your Dataset

1. After selecting "Upload Data", you will have the option to either Search or Upload.
  - a. If you have a dataset in mind already, then use the search function to get started.
  - b. However, if you are attempting to upload an excel spreadsheet, select Upload Files from your Computer, and then add the dataset you want to use. Make sure that you save your Excel Spreadsheet as a .csv file.
2. If you are attempting to use a Google Spreadsheet, make sure the spreadsheet is published as a .csv file and is completely up to date. Get the URL under the Get a link to published data from the Google Spreadsheet and paste that in a URL Link from the web.
3. Once you have uploaded your dataset, it will then take you to the step of geolocating your data. The webpage should look as shown to right.



4. Assuming you set aside two columns for latitude and longitude, select Locate using the latitude and longitude columns.
5. Select Continue when you reach Review Your Dataset and enter the metadata fields when you reach Describe and Share your Dataset. You can control the privacy of your dataset here. Click save once you have finished entering the fields.
6. Finally, review your data as it is plotted, and click Map Data
7. Your dataset should be uploaded and you should now see it in the Geocommons map interface.

### ***Styling your Dataset***

Geocommons provides several tools for effective means of analyzing your data.

- **Shape:** Choose what will represent your datapoints. To be a little more creative, you can create a custom .gif image to use as your data points and upload it to a third party site such as [www.photobucket.com](http://www.photobucket.com), and paste the URL for the image.
- **Color Theme:** You can select a color gradient for your data points that will approach the darker end of the color scheme based on the value of any field within your dataset. Select the field under the section *Attribute*. You can vary the groupings of the data points by manipulating how many *Classes* your dataset is divided into.
- **Icon Sizes:** If you did not use the graduated color scheme to change the data set, you can manipulate the icon sizes to be graduated according to a certain attribute, from small to large.
- **Line Thickness, Transparency and Infowindows:** In the next three tabs, you can manipulate the thickness and transparency of your icons (unless you used a custom .gif), as well as the style of the info window of each data point.

### ***Layers***

1. Once you have created a map, you can add other datasets or divide your dataset into separate layers and add them to the map as a new dataset in order to easily turn the display for these layers on and off. You can drag them in order what layers will be in front of other layer
2. You can also scour the Internet or Geocommons for different mapping displays. Basemaps will provide you with different mapping interfaces to better suit what data you are trying to display. You can also supplement your data with .shapefiles such as a map of an urban city's districts by searching for them in Find Data or uploading your own inCreate.

Congratulations! You have created your map. Feel free to play around to customize your display in order to create new ways to visualize your data.