

MapTime ™ Tutorial and Introduction October, 2013

MapTime™, an interactive and easy-to-use web mapping and geocoding tool for everyone. This web tool converts geo-related databases, such as street information, latitudes and longitudes, or GPS coordinates, into maps. MapTime™ provides meaningful and valuable visualization functions for users, including hotspots, cluster map numbers, and on-the-fly keyword filter functions. If you have sensitive records, such as health records or social media records, MapTime™ can provide "GeoMasking" function to randomize your data point locations (within 100 meter radius) and protect locational privacy.

You can start using MapTime™ by going here: https://www.pathgeo.com/demo/maptime/

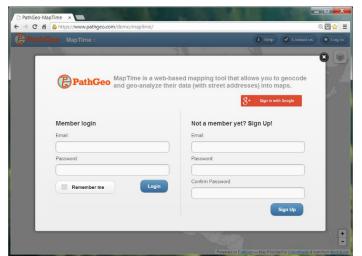
MapTime™ features:

- 1. Smart geospatial data field recognition (automatically identify meaningful geocoding column in your datasets).
- 2. Accepts various data formats: Excel files, CSV files, etc.
- 3. Responsive and interactive keyword filter function.
- 4. Powerful visualization tools (Hotspots, Cluster Maps, Keyword filter, and User-selected Symbols).
- 5. GeoMasking, a function for protecting locational privacy.
- 6. Data download functions, which allow users to download geocoded datasets, GeoMasking datasets, and keyword-filtered datasets into Excel file formats.

Please provide us your valuable feedback by using the "Help" tab on the Top Menu of MapTime or email us at info@pathgeo.com. Thank you so much for your great help!

Tutorial:

1. Register your PathGeo Account and start testing MapTime™ here: https://www.pathgeo.com/demo/maptime/



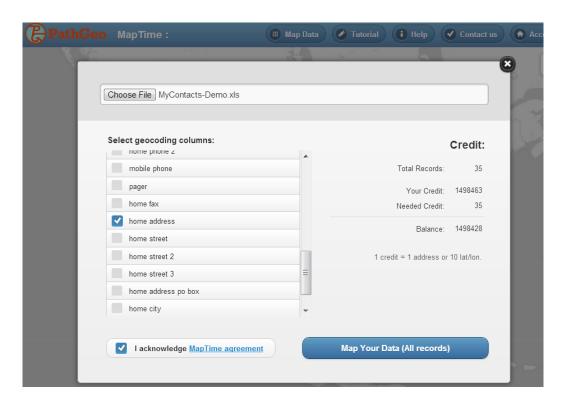
You can create a new member account or sign in with Google.

If you log in with your Google account, an additional window may pop up asking to give MapTime™ permission to access your account. Click 'Accept' if you wish to log in through Google. After sign-in, you can start to use MapTime™ by either uploading your own data or trying our sample data.

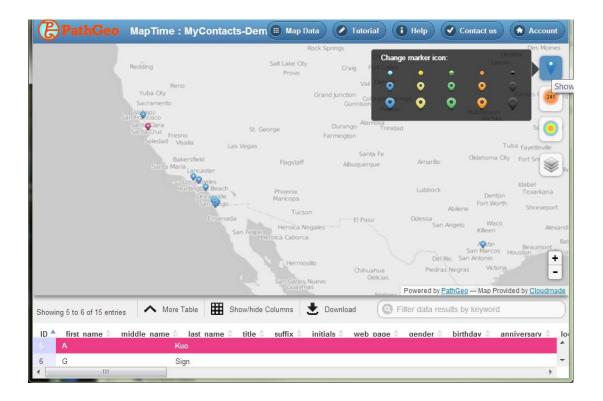
- 2. In this tutorial, we will use three files to demonstrate the functions of MapTime:
 - a. MyContacts-Demo.xls
 - b. Social-Media-Demo.xlsx
 - c. SteveJobs-GoogleSearch-Demo.xlsx

You can download these demo files from the Tutorial Page in the MapTime. In the Appendix-A, we will teach you how to create your own contact list excel file. Save these demo files into a local folder in your computer.

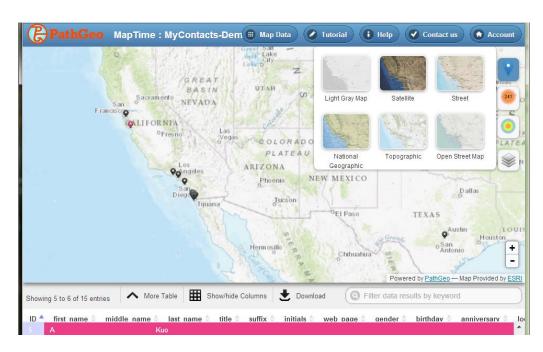
- 3. Click the "Map Data" button at the top menu. A popup window will appear. In the popup window, click on the [Choose File] button and select the "MyContacts-Demo.xls" from your local disk. After the selection, all columns in your Excel file will be displayed under the "Select geocoding columns". Scroll down these fields and check the "home address" field (after scrolling down a few times). We will use this "home address" in your contact list to convert your friends' addresses into map points.
- 4. Check the box of "I acknowledge MapTime agreement". Please read the PathGeo Subscription Agreement for MapTime.
- 5. Click on "Map Your Data (All records)" (blue button). The MapTime will convert the MyContact-Demo street addresses into map points.



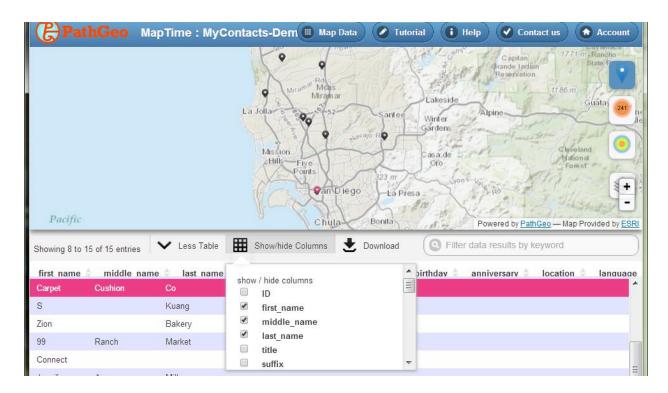
6. MapTime will display a map with several blue dots showing the locations of friends in your Contact List. You can click on the "More Table" button on the lower part of the window to see more record information in the Table View Area (in the bottom of MapTime).



- 7. Each blue dot was geocoded by their street addresses. You can see that in our demo data, most people are located in California and only one friend is located in Austin, Texas. You can zoom in to San Diego to see the locations of these friends.
- 8. You can click on the Marker Icon (Blue marker icon on the right side of window) to switch different color or size for your maker. Let's switch to BLACK color and use the middle size of marker.
- 9. You can also change the base map by click on the map layer icon (showing three maps overlaying together). Let's switch the base map to "Topographic".



10. You can use the horizontal "scroll bar" on the bottom of the Table View window to see other attributes in the MyContact records, such as first name, last name, web page, home city, and home state. You can also click on the "Show/hide Columns" button to hide specific columns you don't need. Let's click this button and uncheck the "ID", "title", and "suffix". After you uncheck each column, the table view will automatically change to the new view setting.



11. The hotspots function uses an algorithm (kernel density) to highlight the clustered point records in different streets and areas. The red color areas indicate that more points are aggregated and the green/blue areas indicate a less aggregated spatial distribution. You can change the radius of hotspot analysis in the icon tool. Please change the current radius in the hotspot analysis to 2005 meters. You can toggle the display ON or Off of the hotspot map by clicking on the tool icon.



- 12. We can use the keyword filter function to search for specific name among your friends. Move your mouse cursor to the lower right corner to the text input field [Filter data results by keyword]. Type "Kuo" and then press Enter. You will see the MapTime automatically zoom in to the home address of Mr. Kuo (located in San Jose).
- 13. We can switch to another map view now. Click on the "Cluster Map" icon to toggle-on or toggle-off the cluster map. In the cluster map view, the number inside the map circle indicate how many points was represented by this circle and when you move your move cursor on the top of the cluster point, it will show the boundary of the points within this cluster.

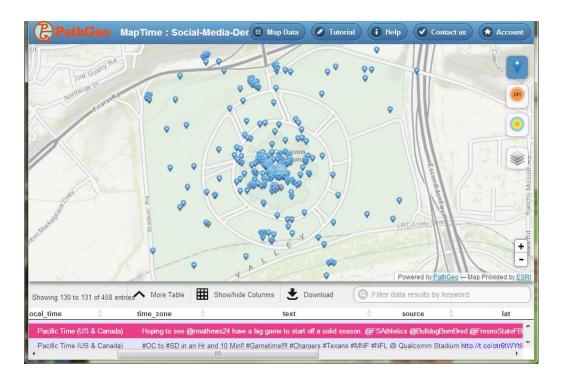


- 14. Now we finish our first demo with MyContact information. You can click on the "Account" icon on the top right window (blue menu) to see how many credits you have used in the process.
- 15. Click on the "Account Detail" below the Credit number. You can see your personal account information and your remaining credits in PathGeo.
- 16. Finally, you can use the "Download" function on the bottom of the window to download your contact list with full lat/long coordinates. So you don't need to re-do the geocoding next time!
- 17. Click on the "Help" tab to the left of the account information. (You can either use this Help tab or click the "Help" button at the top of MapTime to submit your feedback to us). Now you can write down your comments, feedback, suggestions, and bug reports to us. We really appreciate your great help!
- 18. When you finish your comments, please click on "Submit". Thank you!

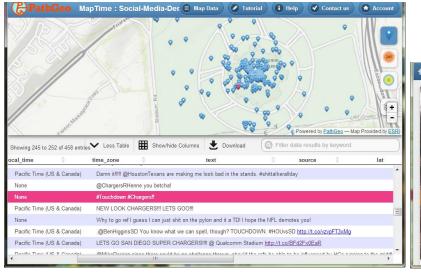
In the next two pages, we will also show you how to use MapTime to display social media datasets and Google Search Result datasets.

Displaying Social Media Datasets

You can click on the [Map Data] menu → [Choose File] to add the second demo data, "Social-Media-Demo.xlsx". After selection, the MapTime will automatically recognize the two geocoding field, "lat" and "lon". Check on the "I acknowledge MapTime agreement. Then click on the [Map Your Data]. This demo data will show a small set of collected social media data inside the San Diego Qualcomm Stadium during a football game. You can see each blue dot representing a geo-tagged social media message. You can browse the "text" field and see what's people's comments during the football game.



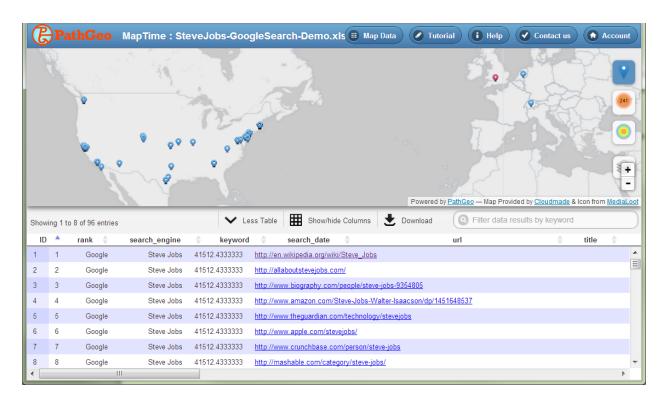
The interesting thing in this dataset is that many social media messages include hyperlinks to pictures, video and web pages. Please try to click one blue color hyperlink to see the game picture.





Display Google Search Results (with "Steve Jobs" keyword)

You can click on the [Map Data] menu → [Choose File] to add the third demo data, "SteveJobs-GoogleSearch-Demo.xlsx". After selection, the MapTime will automatically recognize the two geocoding field, "latitude" and "longitude". Check on the "I acknowledge MapTime agreement. Then click on the [Map Your Data]. This demo data will show the geolocation of 100 web pages (with ranking) related to "Steve Jobs" by using Google Search Engine.



You can see the most web pages related to "Steve Jobs" are located in U.S. and only three of them are located in Europe. You can select the point in the U.K and see which page about Steve Jobs are located in U.K. Please feel free to try different mapping functions in MapTime.

If you have any questions regarding MapTime or PathGeo, please email to info@pathgeo.com or use the "Help" menu in MapTime to submit your feedbacks.

Sincerely,

PathGeo Team. https://www.pathgeo.com/

Appendix-A: How to create your own contact list with street addresses in Excel.

One key function of MapTime is to geocoding street addresses into Maps. Everyone have your own contact information in your Smart phone or Gmail account. Have you been thinking about what is the distribution pattern among your friends? How many friends live very close to your home? You can use MapTime to visualize your friends' locations or your customers' locations if they have address information in your customer databases.

We will show you a step-by-step way to create the MyContactList.xlsx file from Google Contacts.

- 1. Login your Google Account or Gmail. Switch to "Contacts" (top menu).
- 2. Click on "More" menu (below the top search text input box). → "Export..."
- 3. You can select a specific group or **All contacts** to export.
- 4. Select "Outlook CSV format" for export format.
- 5. Click on "Export" button. Open the contacts.csv file in Excel first. Then save it into your local folder with Excel formats. You can save the file with the name, MyContacts.xls

