Team Dijkstra's Disciples: Eagle Maps

What is Eagle Maps?

Eagle Maps exists to provide a streamlined experience for people traveling around Emory University by providing optimal routes throughout campus and important information regarding campus buildings. Eagle Maps allows users to access and visualize Emory-specific information that Google Maps does not provide.

How can you access Eagle Maps?

Eagle Maps is publicly accessible and can be reached by entering eaglemaps.link into your preferred browser. Please use Eagle Maps on a computer (i.e. laptop or desktop) as the visuals are not formatted for mobile devices. When the website first loads, it will ask you to share your current location – *without your current location, any Eagle Maps features which require your current location, including the directions, will not work.*

What can you do with Eagle Maps?

1) **View Building Information**
   Use the search bar at the top of the page to search for a specific location or building, on or off Emory's campus. A list of autocomplete places biased toward the surrounding region will appear, and upon selecting one a sidebar containing information about the building will appear on the right-hand side of the screen. If applicable, the location's name, address, coordinates, phone number, website and associated photos are available. If multiple pictures exist, the "Next Image" and "Previous Image" buttons directly beneath the photos provide the option of scrolling through them. If no places are available, a photo of Emory's 21st president, Gregory Fenves. Selecting the "Get Directions" button at the bottom of the sidebar will generate directions from the user's current location to the selected location.

2) **Obtain Optimal Routes**
   While Google Maps contains information and coordinates for all the buildings on Emory's campus, it sometimes only has data for one entrance or side of a location. Its routes often require users to circumvent a building and bypass one entrance in favor of one farther away. Eagle Maps solves this fluke by comparing the routes to each entrance of an Emory location and providing the user with a path to the closest entrance from the user's current location. Alternative routes are provided if available, and users also have the option of checking the "Show Least Elevation" box to highlight the route with the least elevation gain in red. Walking directions are automatically computed as the default, but users can also

use the "Transportation" button to select driving, bicycling or public transit directions if they desire them. Optimized routes are only available for Emory buildings, but directions are available for locations anywhere in the world. If the user wants to simply view their current location, the "Current Location" button at the top of the screen will place a pin at the user's current location at the center of the screen. Hovering over the pin causes an information window containing the coordinates of the current location to appear.

3) **Filter Emory Buildings**
It can take quite a while for students, staff and faculty to become familiar with the particularities of a college campus, and even upperclassmen and tenured employees struggle to remember which services are offered where. Eagle Maps aggregates all the Emory building information and allows users to use the filters at the top of the screen to view buildings which belong to the chosen filter category. The four main filters are "Food," "Study," "Buildings" and "Campus." All are dropdowns, and clicking on a dropdown option plots pins at the locations corresponding with the given filter. The first three filters largely provide building specific information; for example, the "Dooley" option under the "Food" filter will add pins for all the locations on campus that accept Dooley dollars as a valid form of payment. A similar process applies to the "Printer" option under the "Study" dropdown and the "Residential" option under the "Buildings" filter. Hovering the mouse over the pins causes an information window containing the specific building information to appear, and moving the mouse away causes it to disappear. To make an information window stay, click on its associated pin; to make it disappear, click on the "x" button in the upper right corner.

4) **Visualize Hub Events**
The "Campus" filter dropdown has two components, the first being the "Events" option. Outside of Eagle Maps, the only place for members of the Emory community to know which events are happening on campus is to visit The Hub, which contains information about campus life. However, the website is difficult to navigate and does not display the event information in an efficient manner. Eagle Maps takes the information from The Hub and plots it spatially, allowing users to view the locations of each campus event. Only events which are happening on the current day are displayed, and the events disappear from the map two hours after the start time listed on The Hub's website so that users are unable to view events which have already occurred. As with the building filters, hovering over the pins reveals an information window containing the event name, location and start time.

5) Plan Shuttle Trips

Like The Hub events, the Emory shuttle route information is difficult to navigate, both on Transloc and on Emory's transportation website. In an attempt to collect the shuttle information in a more easily accessible way, the "Shuttle" option under the "Campus" filter dropdown allows the user to view shuttle stops for the shuttles of their choosing. The stops show up under shuttle icons rather than the usual pins, and hovering over the icons brings up an information window containing the stop name, the shuttles which stop at it and a link to Emory's transportation website. If a shuttle is not running at the time when the user is attempting to view its stops, an alert pops up stating that the shuttle is not currently running.

To clear the directions or building information sidebars, press the "x" button on the right hand side of the autocomplete search bar. To close the shuttle sidebar, press the ">" button located in the upper right hand corner. The "Markers" dropdown on the far left side of the buttons panel at the top of the screen provides users the option to "Hide," "Show" and "Delete" all the pins currently on the screen.