Maps Mania: Searching for Map Patterns
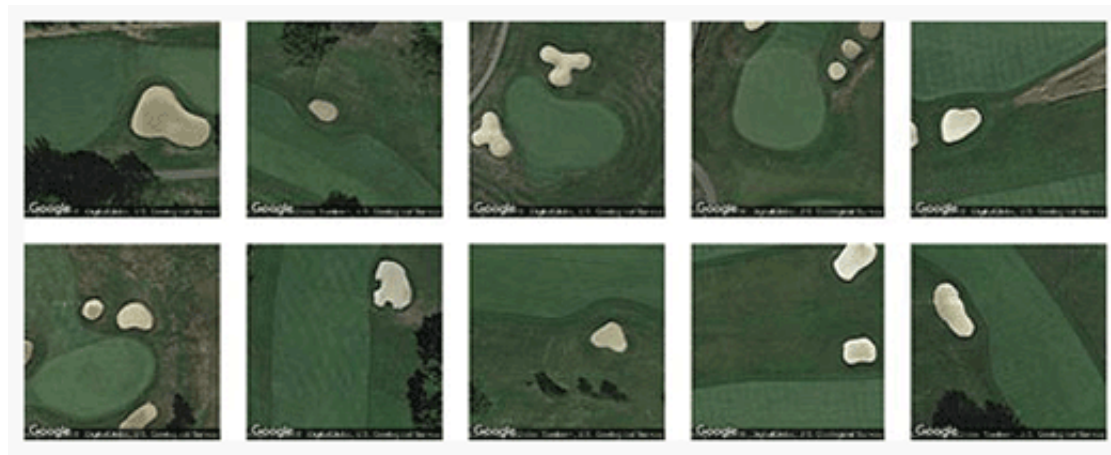

A few years ago Onformative developed an algorithm, called **GoogleFaces**, that scans Google Maps satellite imagery looking for patterns in the landscape that we might recognize as resembling human faces.

Terrapattern has taken this idea of detecting patterns in aerial imagery and developed it into something that is actually very useful. Using deep learning machine vision techniques Terrapattern is able to accept a user input (a selected area on a satellite map) and search for other locations which look the same.

For example, if you click on a golf course sand trap on the aerial map Terrapattern will instantly find other locations with golf course sand traps. Click on a stretch of a nice river bank with tree cover and you will be shown other locations where Terrapattern recognizes the same patterns in the imagery.

At the moment Terrapattern only works for Pittsburgh, San Francisco, New York and Detroit. However other cities are coming soon. The Terrapattern **about** page has other examples that you might want to try searching for, such as baseball diamonds, airplanes or solar panels. Part of the fun of Terrapattern however is just clicking on the map to see how quickly it finds other similar looking locations.

That 'about' page also includes a lengthy 'How it Works' explanation of the neural network behind Terrapattern.

Posted by Keir Clarke at 12:51 PM