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FotoHound User Guide

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1 Overview

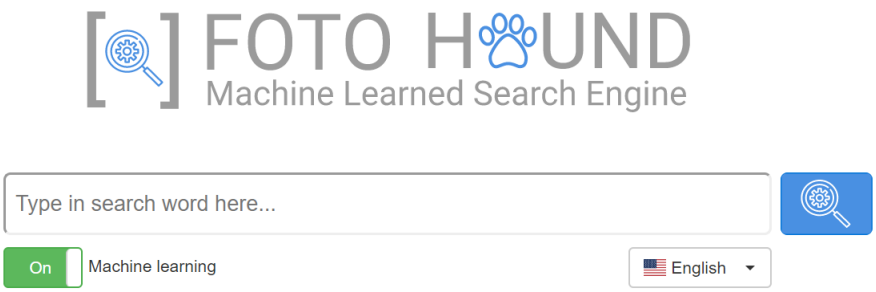

Figure 1: User interface

Figure 1 shows the main user interface. Here, we have the search bar into which you type your search query. Under the search bar we can find a set of settings for our search. On the left is the option to turn machine learning on and off. The main difference is, when searching with machine learning turned off, one is searching with only the search word that was provided, and when turned on, the machine learning finds related words and includes them in the search.
On the right, you can specify which language the machine learning should interpret the search word as. This helps when generating related words, but makes no difference if the machine learning is turned off.

Finally, the blue button to the right of the search bar, starts the search. One can also press the ”Enter” key on a keyboard to achieve the same effect.

2 Searching

Figure 2: Doing a search. Images provided by Reuters

Figure 2 shows a user doing a search for the word "boat". Now, since the machine learning switch was turned "On", the machine learning service found several word that it thought was related, and included them in the search. The results are very straight forward, if you hover you mouse pointer over a picture, you can see the caption/title of that given picture. See section 2.1 to see what happens if you click on a picture picture.
Since we are searching with machine learning on, we are searching for, in this case, 21 words. In the top right corner, you can see which words the machine learning service found as related. This object, called a word cloud, is clickable, and when clicked will enlarge the size of the word cloud so the words easily can be read. See 2.2 for an example.

2.1 Clicking on a result

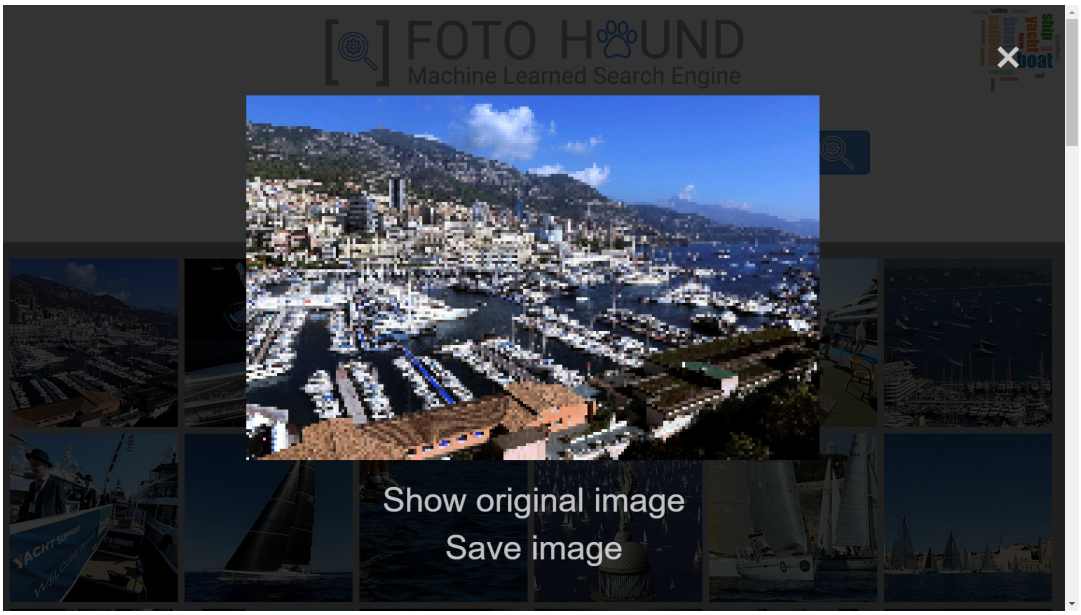

Figure 3: Clicking on a result. Images provided by Reuters

When clicking on an image, the service will load a larger version of the image and show it in an overlay. In this case, we had to blur the image to avoid copyright infringement.
Under the image, is the options to open the image in full size. This will load the full size version in a new tab.
The save image will download the full size image to you device.
In the top right corner is the option to close the overlay and return to the search.

2.2 Check included words

Figure 4: Showing the word cloud. Images provided by Reuters

Figure 4 shows the the words included in the search. These words were found the machine learning service as related and was included into the search to give better results.
The size of the words is representative of how related the words are to the original search word, typed into the search bar.

3 Taking advantage of the search field

3.1 Subtracting a semantic meaning

Figure 5: Search for boat while subtracting show. Images provided by Reuters

Figure 5 show how to take advantage of the search bar, and use it as a semantic meaning. Let's say that when you did the search in section 2, did not like the images you were shown, and did not want to see boats in a show setting.
To rectify this, you can subtract the semantic meaning of the word show", by typing "-show" after the initial search word, as shown in the figure. By doing this, you can guide the machine learning to the correct semantic meaning from which the related words should be found.

3.2 Adding a semantic meaning

Figure 6: Search for boat while subtracting show and adding show. Images provided by Reuters

Let's say that you still are not happy with the results shown. You can add as many following words as you like to better define the wanted results, and the machine learning will do its best to find related words that can be helpful.
As an example, let's say the results in 3.1 was not what you wanted, and you rather wanted to see images of sail boats. By adding "+show" after the current search string we can guide the related words in the right direction and by this, getting better results. If you were to do this in our application, the results could look like this