Lire Assignment

Miguel Pérez
David Burrell
Rodrigo Pueblas
Ángel Igareta

LIRE application:

Out application is an image indexing application which allows the user to know the toxicity edibility of any mushroom photographed.

The main problem for a lay person who collects mushrooms is to identify properly each mushroom in order to avoid intoxications.

Our application will serve as a reliable tool to perform this type of analysis only based on a single provided image.

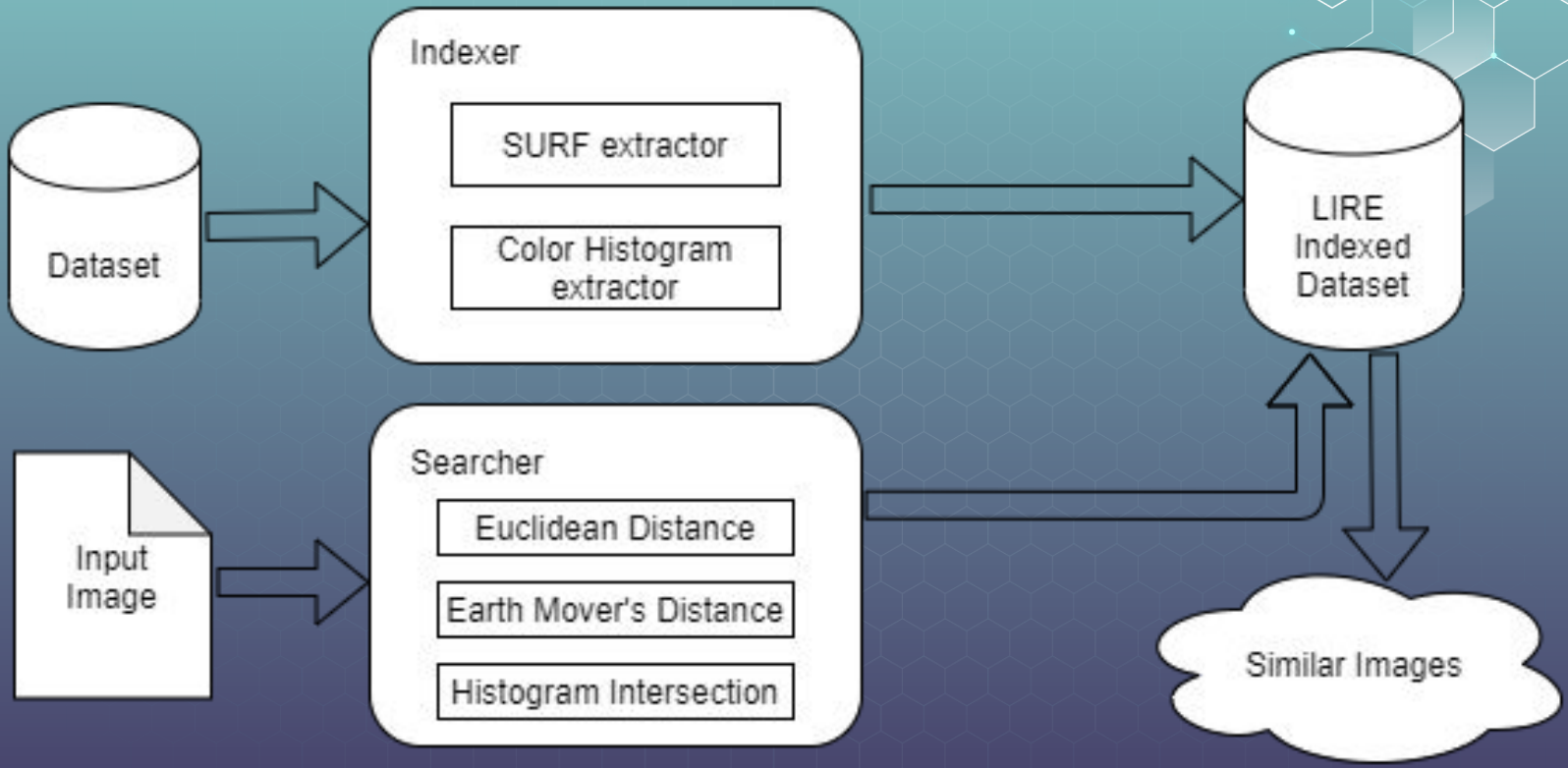
Our Dataset

Our dataset consists in the result from scraping the web:
http://www.mushroom.world/

We reused an open source implementation from a group of students from Helsinki.

Although 626 images where scarpaed, due to memory issues only 26 were used in the final testing

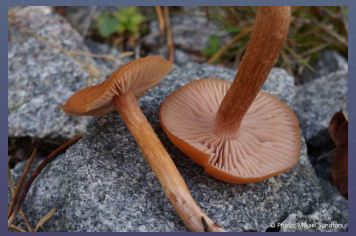
Application Schema:



Defined Metric

Three categories depending on the output images

Category	Result	Example
Same species is returned as the **first result**.	14/26 = 54%	Laccaria Lacata[1]
Same species is returned within the **first ten results** (but not first).	9/26 = 35%	Cantharellus Cibarius[2]
Same species is **not within the returned ones**.	3/26 = 11%	Gomphidius Glutinosus[3]



Top1 result (1)

Top10 result (2)

None result (3)

Results for Agaricus Arvensis (0)

On the left, you can see the input image, and on the right you can see the similar images retrieved.

Agaricus Arvensis (1)
Score: 308.40

Cortinarius Collinitus (2)
Score: 667.02

Amanita Pantherina (0)
Score: 621.66

Results for Hygrophorus Hypothejus (I)

On the left, you can see the input image, and on the right you can see the similar images retrieved.

Cantharellus Cibarius (3)
Score: 1300.44

Cortinarius Collinitus (2)
Score: 1728.13

Hygrophorus Hypothejus(2)
Score: 1371.27

Thank for your time!