

Reconnaissance des Plantes à l'aide du CNN

29/11/2021

500 Iterations, 2 classes

Résultats:

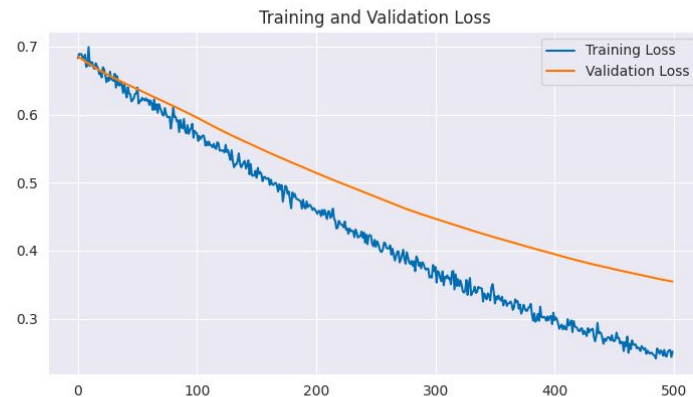
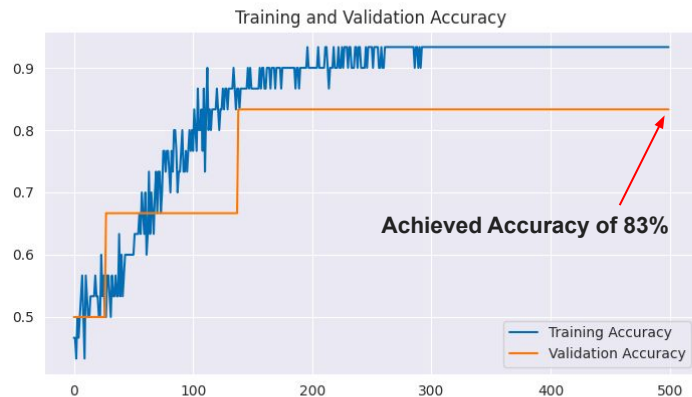
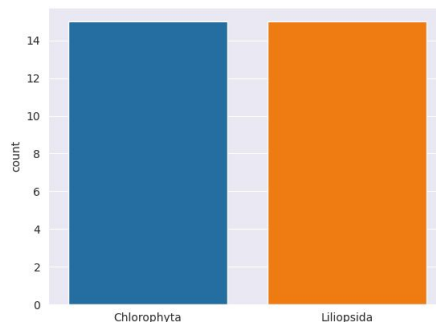


Figure 1: Training and Validation Accuracy and loss in function of Iterations number

On considère 2 classes:

- 1/ Chlorophyta
- 2/ Liliopsida



*On cherche à minimiser les **pertes** (losses),
*On veut que la **précision** (accuracy) soit proche de 1.

Figure 2: Classes in function of images number

Training Data:



Fichiers

Nom ↑



 1.jpg



 2.jpg



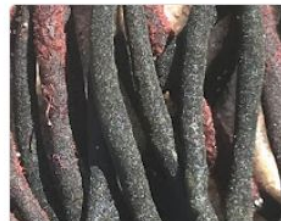
 3.jpg



 4.jpg



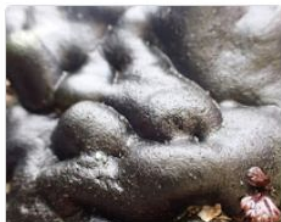
 5.jpeg



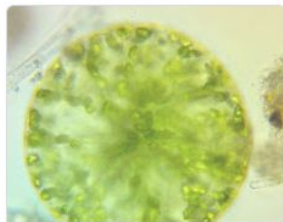
 6.jpg



 7.jpg



 8.jpeg



 9.jpg



 10.jpg



 11.jpg



 12.jpg



 13.jpg



 14.jpeg



 15.jpeg

[DataBase \[1\]](#)

Training Data:



Fichiers

Nom ↑



1.png



2.png



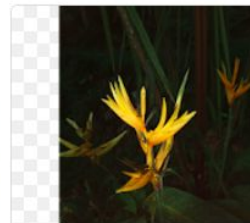
3.png



4.png



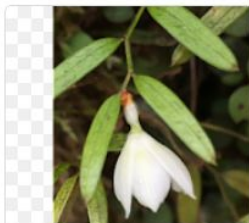
5.png



6.png



7.png



8.png



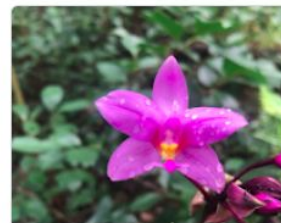
9.png



10.jpg



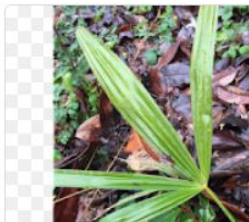
12.png



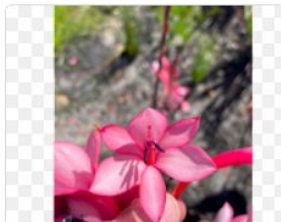
13.png



14.png



15.png



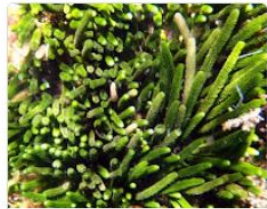
16.png

[DataBase \[1\]](#)

Test Data:

Mon Drive > ... > test > Chlorophyta ▾ 👤

Fichiers




 Caulerpa brownii.jpeg



 Caulerpa cactoides (Turn...



 Caulerpa cactoides (Turn...

Mon Drive > ... > test > Liliopsida ▾ 👤

Fichiers



 Cryptostylis subulata.png



 Cyrtanthus .png



 Platanthera chlorantha.jpg

[DataBase \[1\]](#)

Questions:

- Nombre de classes?
- Nombre d'images dans chaque classe?

Références:

- [1] Citation, GBIF.org (28 November 2021) GBIF Occurrence Download <https://doi.org/10.15468/dl.tw3m3g>
- [2] Lien, https://keras.io/guides/sequential_model/
- [3] Lien, <https://medium.com/@cdabakoglu/what-is-convolutional-neural-network-cnn-with-keras-cab447ad204c>
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- [6] Lien, <https://www.machinecurve.com/index.php/2019/12/16/what-is-dropout-reduce-overfitting-in-your-neural-networks/>
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- [8] Lien, <https://www.kaggle.com/c/siim-isic-melanoma-classification/discussion/160147>
- [9] Lien, <https://www.analyticsvidhya.com/blog/2020/10/create-image-classification-model-python-keras/>