## leafnet



- 아직 자세히 조사하지는 못했다.
- leaf classification을 위해서 만든 net이다.
  - · CNN based.

## <u>LeafNet: A computer vision system for automatic plant species ident ification</u>

https://www.sciencedirect.com/science/article/pii/S1574954116302515?via%3Dihub

- pre-trained model을 다운받을 수 있다.
  - 식물 데이터를 학습했기 때문에 pre-trained가 더 적합할 수도 있을 것 같다.

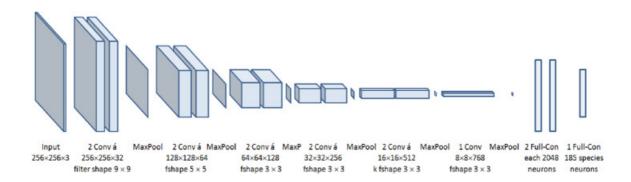
## LeafNet

https://leafnet.pbarre.de/#ftn\_2

- Larger filter shapes in the lower layers of the CNN capture larger regions
  of the feature map and so improve the quality of the convolution

  ⇒ target의 복잡도가 높지 않을때(imageNet 무작위 이미지 대비)는 초기 conv에
  는 큰 필터 사이즈가 나았다는 뜻인 것 같음.
- We trained the LeafNet network on the LeafSnap dataset in 200,000 iterations and employed a momentum  $\alpha$  = 0.9, mini-batches of 10 training examples and started with a learning rate  $\eta$  = 0.001. After 100,000 iterations the learning rate is decreased by a gamma value  $\gamma$  = 0.1 resulting in a new value of the learning rate  $\eta$  = 0.0001 to foster convergence.

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이 페이지 url

https://www.notion.so/leafnet-7fec82c9244a40e8ae9641b1716e43e9

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