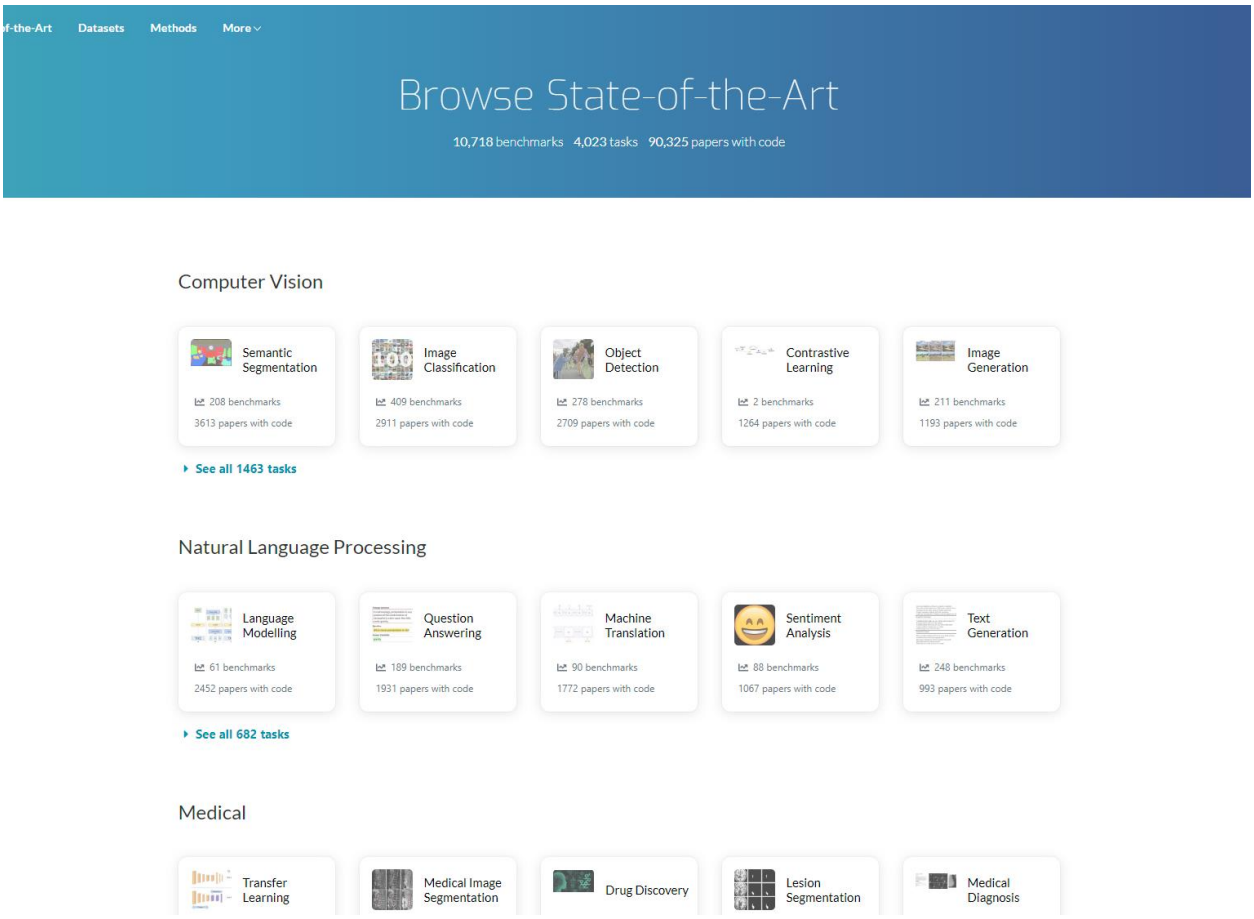
Solution report:

To achieve the best results in Soil erosion on your particular dataset, it seems to me that it is certainly necessary but not enough to read papers on soil erosion detection using deep learning, for example, in google scholar or arxiv, such articles are focused on how to solve soil erosion on custom datasets (that is, each article uses a different dataset that interests the authors of the paper) using deep learning

If there was one well-known dataset on soil erosion detection as a semantic segmentation task (I did not find it), where scientists competed to get the best results using neural networks, it would be much easier

Therefore, in my opinion, it would be worth paying attention to the paperswithcode website https://paperswithcode.com/task/semantic-segmentation section semantic segmentation where scientists compete to get the best results on a particular dataset

Here you will be able to find sota and the best ideas at the moment specifically in semantic segmentation, which you can already try to use depending on the context for yourself



Computer Vision

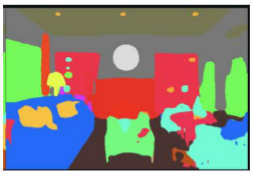
Semantic Segmentation

Edit

3613 papers with code • 97 benchmarks • 255 datasets

Semantic segmentation, or image segmentation, is the task of clustering parts of an image together which belong to the same object class. It is a form of pixel-level prediction because each pixel in an image is classified according to a category. Some example benchmarks for this task are Cityscapes, PASCAL VOC and ADE20K. Models are usually evaluated with the Mean Intersection-Over-Union (Mean IoU) and Pixel Accuracy metrics.

(Image credit: CSAILVision)



Benchmarks

Add a Result

These leaderboards are used to track progress in Semantic Segmentation

Trend	Dataset	Best Model	Paper	Code	Compare
	ADE20K	InternImage-H (M3I Pre-training)			See all
	Cityscapes test	InternImage-H			See all
	ADE20K val	BEIT-3			See all
	Cityscapes val	InternImage-H			See all
	NYU Depth v2	CMX (B5)			See all
	PASCAL Context	InternImage-H			See all
	PASCAL VOC 2012 test	DeepLabv3+ (Xception-65-JFT)			See all

Content