README.md

TableNet

Unofficial implementation of ICDAR 2019 paper : *TableNet: Deep Learning model for end-to-end Table detection and Tabular data extraction from Scanned Document Images.*

Paper

Overview

Paper: TableNet: Deep Learning model for end-to-end Table detection and Tabular data extraction from Scanned Document Images

TableNet is a modern deep learning architecture that was proposed by a team from TCS Research year in the year 2019. The main motivation was to extract information from scanned tables through mobile phones or cameras.

They proposed a solution that includes accurate detection of the tabular region within an image and subsequently detecting and extracting information from the rows and columns of the detected table.

Architecture: The architecture is based out of Long et al., an encoder-decoder model for semantic segmentation. The same encoder/decoder network is used as the FCN architecture for table extraction. The images are preprocessed and modified using the Tesseract OCR.

Source: Nanonets

architecture

How to run

```
pip install -r requirements.txt
```

1. Download the Marmot Dataset from the link given in readme.
2. Run `data_preprocess/generate_mask.py` to generate Table and Column Mask of corresponding images.
3. Follow the `TableNet.ipynb` notebook to train and test the model.

Challanges

- Require a very decent System with a good GPU for accurate result on High pixel images.

Dataset

Download the dataset provided in paper : Marmot Dataset.