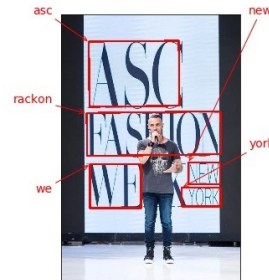


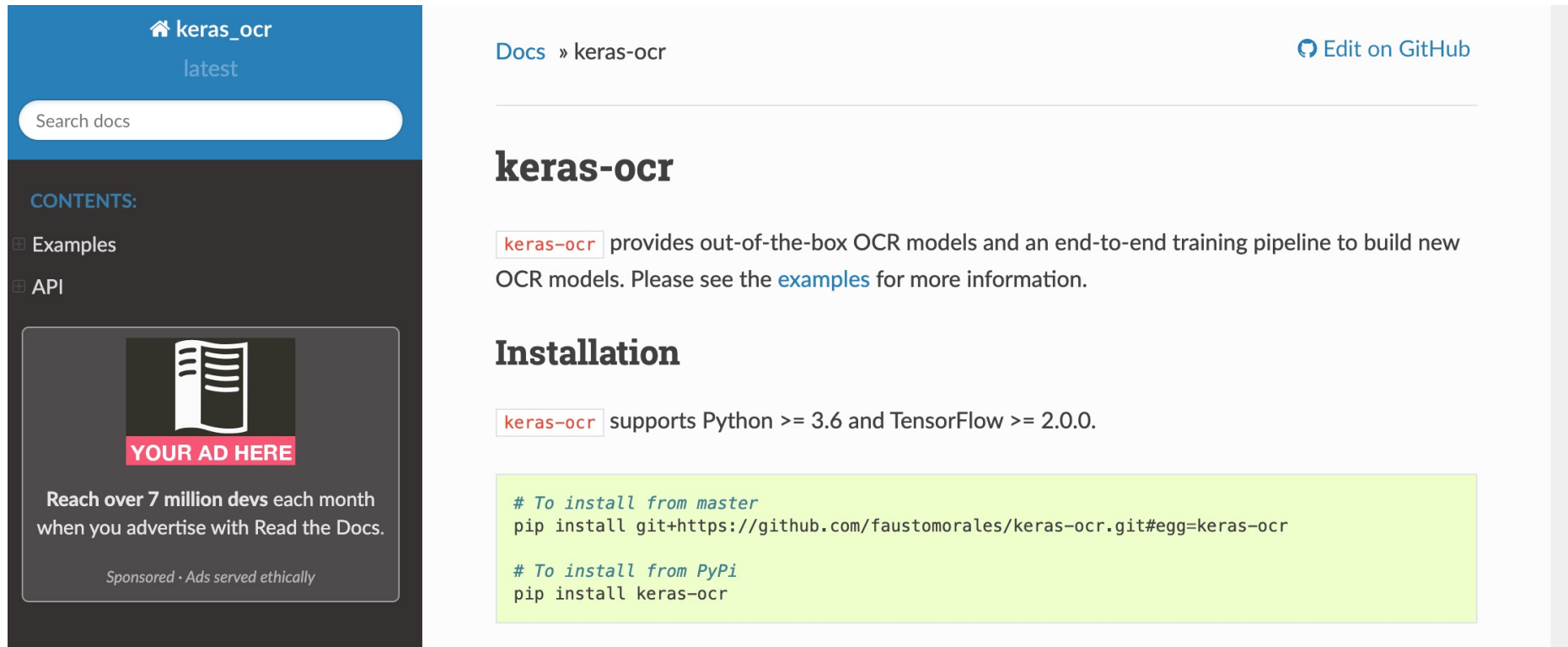
TensorFlow 2.0 CRNN Implementation

- <https://github.com/faustomorales/keras-ocr>



Keras-ocr documentation

- <https://keras-ocr.readthedocs.io/en/latest/>



The screenshot displays the Keras-OCR documentation page on Read the Docs. The left sidebar features a blue header with 'keras_ocr' and 'latest', a search bar, and a 'CONTENTS' section with links to 'Examples' and 'API'. Below this is an advertisement for Read the Docs, stating it reaches over 7 million developers monthly and is sponsored ethically. The main content area has a breadcrumb 'Docs » keras-ocr' and an 'Edit on GitHub' link. The title 'keras-ocr' is prominently displayed. The text explains that 'keras-ocr' provides out-of-the-box OCR models and an end-to-end training pipeline, with a link to 'examples'. The 'Installation' section states that 'keras-ocr' supports Python >= 3.6 and TensorFlow >= 2.0.0. A light green box contains two installation methods: from master (using git) and from PyPi (using pip).

keras_ocr
latest

Search docs

CONTENTS:

- Examples
- API

YOUR AD HERE

Reach over 7 million devs each month when you advertise with Read the Docs.

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Docs » keras-ocr [Edit on GitHub](#)

keras-ocr

`keras-ocr` provides out-of-the-box OCR models and an end-to-end training pipeline to build new OCR models. Please see the [examples](#) for more information.

Installation

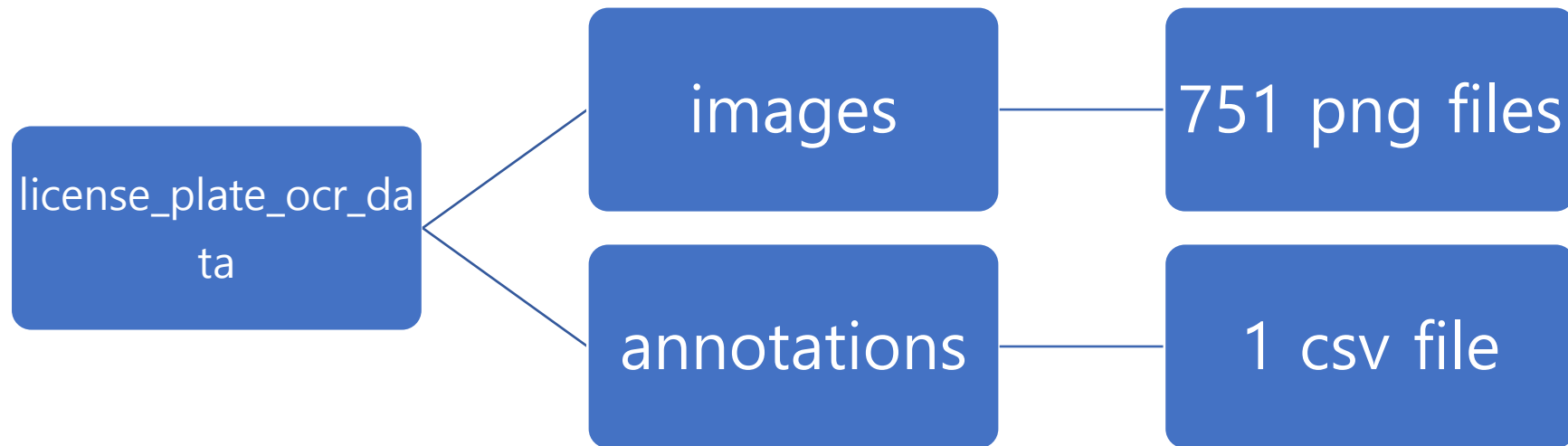
`keras-ocr` supports Python >= 3.6 and TensorFlow >= 2.0.0.

```
# To install from master
pip install git+https://github.com/faustomorales/keras-ocr.git#egg=keras-ocr

# To install from PyPi
pip install keras-ocr
```

License Plate Dataset

- <https://drive.google.com/file/d/16INTGvRGFooolxFX2IR3n-g24NkqDEX6/view>
- 751 license plate images



License Plate Data Format

① Image:



② Annotation:

ak399.png,ak,FGJ235

filename, state alias, groundtruth label

실습 - License Plate OCR Dataset에 대해 CRNN Recognizer 학습

- 기존의 CRNN 모델을 License Plate OCR Dataset에 적합한 파라미터로 Fine-Tuning 해봅시다.



ak399.png
77.9 kB



ak721.png
86.3 kB



ak848.png
82.9 kB



ak1165.png
90.7 kB



al47.png
94.6 kB



al145.png
87.9 kB



al1156.png
88.5 kB



al1181.png
95.7 kB



al1204.png
64.1 kB



al1247.png
84.1 kB



al1259.png
85.6 kB



al1528.png
90.6 kB



al1662.png
93.6 kB



ar127.png
81.8 kB



ar285.png
89.2 kB



ar477.png
66.5 kB



ar480.png
84.0 kB



ar624.png
73.9 kB



ar726.png
60.4 kB



ar785.png
85.7 kB

License Plate Data Format

- <https://colab.research.google.com/drive/1-VMUiOuBRjSeGWG0zcv5eHS7k9ctx5pp?usp=sharing>
- ① https://keras-ocr.readthedocs.io/en/latest/examples/fine_tuning_recognizer.html
참조로 CRNN Fine-Tuning code 작성
- ② get_license_plate_recognizer_dataset 함수 새로 작성
(<https://drive.google.com/file/d/16lNTGvRGFoolxFX2IR3ng24NkqDEX6/view> 에서 다운로드 받은 이미지 및 정답 parsing하는 로직 직접 작성) (참조 코드 : https://github.com/faustomorales/keras-ocr/blob/master/keras_ocr/datasets.py#L102)
- ③ license plate recognizer 데이터셋에 맞게 CRNN 파라미터 Fine-Tuning

Thank you!
