crnn.gluon Documentation

1.0

zhoujun

2018 12 02

Contents:

CHAPTER 1

crnn.gluon

1.1 config module

1.2 convert_rec module

1.3 crnn module

class crnn.**BidirectionalGRU**(*hidden_size*, *num_layers*, *nOut*)
mxnet.gluon.block.HybridBlock

__init__(*hidden_size*, *num_layers*, *nOut*)
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**BidirectionalLSTM**(*hidden_size*, *num_layers*, *nOut*)
mxnet.gluon.block.HybridBlock

__init__(*hidden_size*, *num_layers*, *nOut*)
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**CRNN**(*n_class*, *hidden_size=256*, *num_layers=1*)
mxnet.gluon.block.HybridBlock

__init__(*n_class*, *hidden_size=256*, *num_layers=1*)
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**Decoder**(*n_class*, *hidden_size=256*, *num_layers=1*)
mxnet.gluon.block.HybridBlock

__init__(*n_class*, *hidden_size=256*, *num_layers=1*)
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**DenseNet**
mxnet.gluon.block.HybridBlock

__init__()
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**Encoder**
mxnet.gluon.block.HybridBlock

__init__()
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**ResNet**
mxnet.gluon.block.HybridBlock

__init__()
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

class crnn.**VGG**
mxnet.gluon.block.HybridBlock

__init__()
Initialize self. See help(type(self)) for accurate signature.

hybrid_forward(*F*, *x*, **args*, ***kwargs*)
Overrides to construct symbolic graph for this *Block*.

x [Symbol or NDArray] The first input tensor.

***args** [list of Symbol or list of NDArray] Additional input tensors.

1.4 dataset module

class dataset.**ImageDataset**(*data_txt: str*, *data_shape: tuple*, *img_channel: int*, *num_label: int*, *alphabet: str*, *phase: str = 'train'*)
mxnet.gluon.data.dataset.Dataset

__init__(*data_txt: str*, *data_shape: tuple*, *img_channel: int*, *num_label: int*, *alphabet: str*, *phase: str = 'train'*)

- **data_txt** – label
- **data_shape** – (h,w)
- **img_channel** –
- **num_label** – ,
- **alphabet** –

label_enocder(*label*)
labellabel

label – label

pre_processing(*img_path*)
resizeresize

img_path –

class dataset.**RecordDataset**(*filename*, *data_shape: tuple*, *img_channel: int*, *num_label: int*)
mxnet.gluon.data.dataset.RecordFileDataset

A dataset wrapping over a RecordIO file contraining images Each sample is an image and its corresponding label

__init__(*filename*, *data_shape: tuple*, *img_channel: int*, *num_label: int*)
Initialize self. See help(type(self)) for accurate signature.

label_enocder(*label*)
labellabel

label – label

pre_processing(*img*)
:param img_path: :return:

1.5 keys module

1.6 predict module

class predict.**GluonNet**(*model_path*, *alphabet*, *img_shape*, *net*, *img_channel=3*, *gpu_id=None*)
object

__init__(*model_path*, *alphabet*, *img_shape*, *net*, *img_channel=3*, *gpu_id=None*)
gluon :param model_path: :param alphabet: :param img_shape: (w,h) :param net: model_path :param img_channel: : 1,3 :param gpu_id: gpu

pre_processing(*img_path*)
resizeresize :param img_path: :return:

predict(*img_path*)
numpy :param img_path: :return:

predict.**decode**(*preds*, *alphabet*, *raw=False*)

predict.**try_gpu**(*gpu*)
If GPU is available, return mx.gpu(0); else return mx.cpu()

1.7 train module

train.**accuracy**(*predictions*, *labels*, *alphabet*)

train.**evaluate_accuracy**(*net*, *dataloader*, *ctx*, *alphabet*)

train.**setup_logger**(*log_file_path: str = None*)

train.**train**()

CHAPTER 2

Indices and tables

- genindex
- modindex
- search

Python

c

d

k

p

t

Symbols

C

D

H

K

L

P

T