

NAME

lstmtraining – Training program for LSTM-based networks.

SYNOPSIS

```
lstmtraining --continue_from train_output_dir/continue_from_lang.lstm --old_traineddata
bestdata_dir/continue_from_lang.traineddata --traineddata train_output_dir/lang/lang.traineddata
--max_iterations NNN --debug_interval 0|-1 --train_listfile train_output_dir/lang.training_files.txt
--model_output train_output_dir/newlstmmodel
```

DESCRIPTION

lstmtraining(1) trains LSTM-based networks using a list of lstm files and starter traineddata file as the main input. Training from scratch is not recommended to be done by users. Finetuning (example command shown in synopsis above) or replacing a layer options can be used instead. Different options apply to different types of training. Read [Training Wiki page](<https://github.com/tesseract-ocr/tesseract/wiki/TrainingTesseract-4.00>) for details.

OPTIONS

```
'--debug_interval '
    How often to display the alignment. (type:int default:0)

'--net_mode '
    Controls network behavior. (type:int default:192)

'--perfect_sample_delay '
    How many imperfect samples between perfect ones. (type:int default:0)

'--max_image_MB '
    Max memory to use for images. (type:int default:6000)

'--append_index '
    Index in continue_from Network at which to attach the new network defined by net_spec (type:int
    default:-1)

'--max_iterations '
    If set, exit after this many iterations (type:int default:0)

'--target_error_rate '
    Final error rate in percent. (type:double default:0.01)

'--weight_range '
    Range of initial random weights. (type:double default:0.1)

'--learning_rate '
    Weight factor for new deltas. (type:double default:0.001)

'--momentum '
    Decay factor for repeating deltas. (type:double default:0.5)

'--adam_beta '
    Decay factor for repeating deltas. (type:double default:0.999)

'--stop_training '
    Just convert the training model to a runtime model. (type:bool default:false)

'--convert_to_int '
    Convert the recognition model to an integer model. (type:bool default:false)

'--sequential_training '
    Use the training files sequentially instead of round-robin. (type:bool default:false)

'--debug_network '
    Get info on distribution of weight values (type:bool default:false)

'--randomly_rotate '
    Train OSD and randomly turn training samples upside-down (type:bool default:false)
```

```

'--net_spec '
    Network specification (type:string default:)
'--continue_from '
    Existing model to extend (type:string default:)
'--model_output '
    Basename for output models (type:string default:lstmtrain)
'--train_listfile '
    File listing training files in lstmf training format. (type:string default:)
'--eval_listfile '
    File listing eval files in lstmf training format. (type:string default:)
'--traineddata '
    Starter traineddata with combined Dawgs/Unicharset/Recoder for language model (type:string default:)
'--old_traineddata '
    When changing the character set, this specifies the traineddata with the old character set that is to be replaced (type:string default:)

```

HISTORY

lstmtraining(1) was first made available for tesseract4.00.00alpha.

RESOURCES

Main web site: <https://github.com/tesseract-ocr> Information on training tesseract LSTM:
<https://github.com/tesseract-ocr/tesseract/wiki/TrainingTesseract-4.00>

SEE ALSO

tesseract(1)

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AUTHOR

The Tesseract OCR engine was written by Ray Smith and his research groups at Hewlett Packard (1985–1995) and Google (2006–present).