NEXT WORD PREDICTOR

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Project Parts

- Model and network training
- Front-end interface
- Back-end service and API’s

MODEL AND NETWORK TRAINING

1

TensorFlow-Keras

Deep Learning framework for neural computing projects

DATASETS

English

- From blogger.com
- 751 MB of blogs
- Source: BlogCorpus.htm

Malaysian

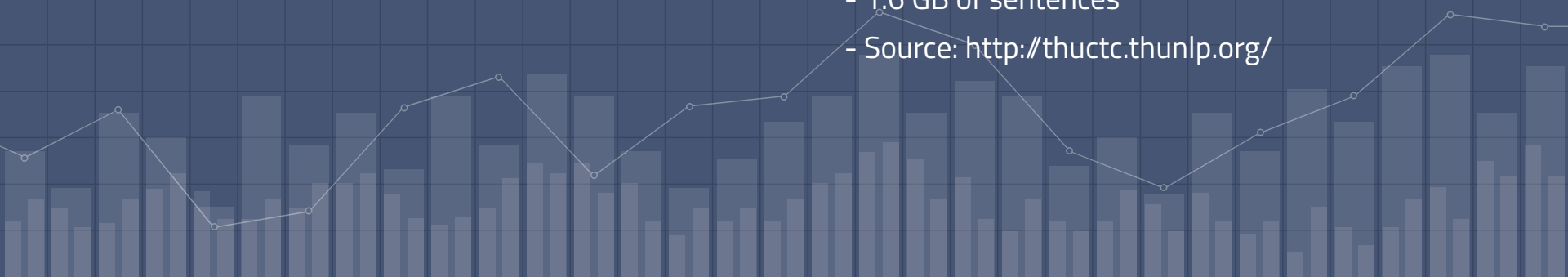
Scraped

Malay

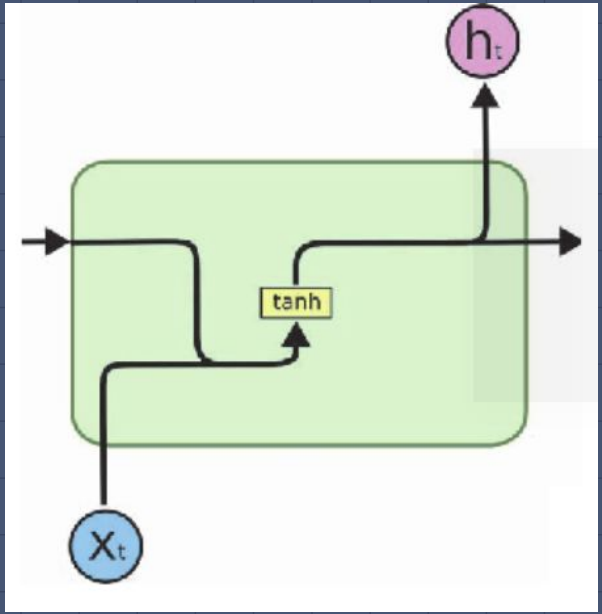
- From news sentiment
- 1400 sentences
-Source: github

Chinese

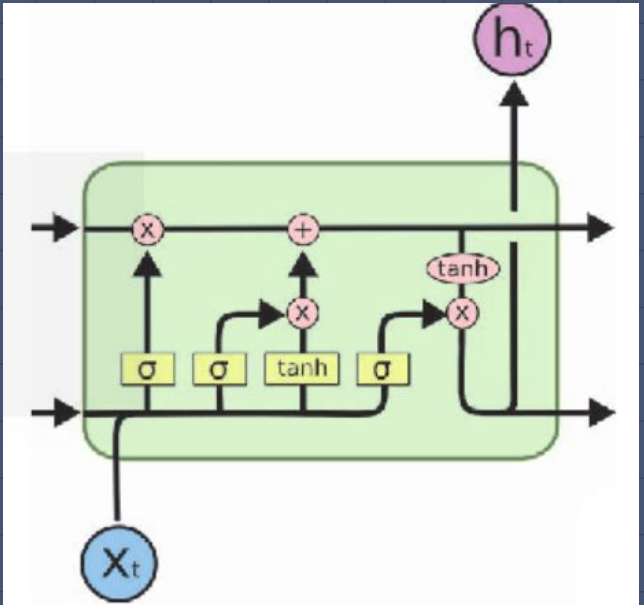
- From THUCNews Dataset
- 1.6 GB of sentences
- Source: http://thuctc.thunlp.org/



Network Architecture

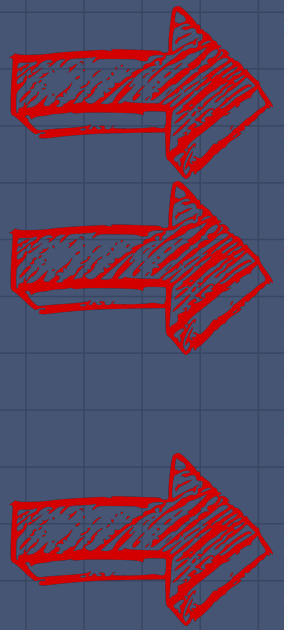


Recurrent Neural Network



Long Short Term Memory

Network Architecture



Layer (type)	Output Shape	Param #
embedding_1 (Embedding)	(None, 20, 512)	1528320
lstm_1 (LSTM)	(None, 20, 128)	328192
dropout_1 (Dropout)	(None, 20, 128)	0
lstm_2 (LSTM)	(None, 128)	131584
dense_1 (Dense)	(None, 4096)	528384
leaky_re_lu_1 (LeakyReLU)	(None, 4096)	0
batch_normalization_1 (Batch	(None, 4096)	16384
dense_2 (Dense)	(None, 2048)	8390656
leaky_re_lu_2 (LeakyReLU)	(None, 2048)	0
dense_3 (Dense)	(None, 2985)	6116265

Total params: 17,039,785
Trainable params: 17,031,593
Non-trainable params: 8,192

FRONT-END INTERFACE

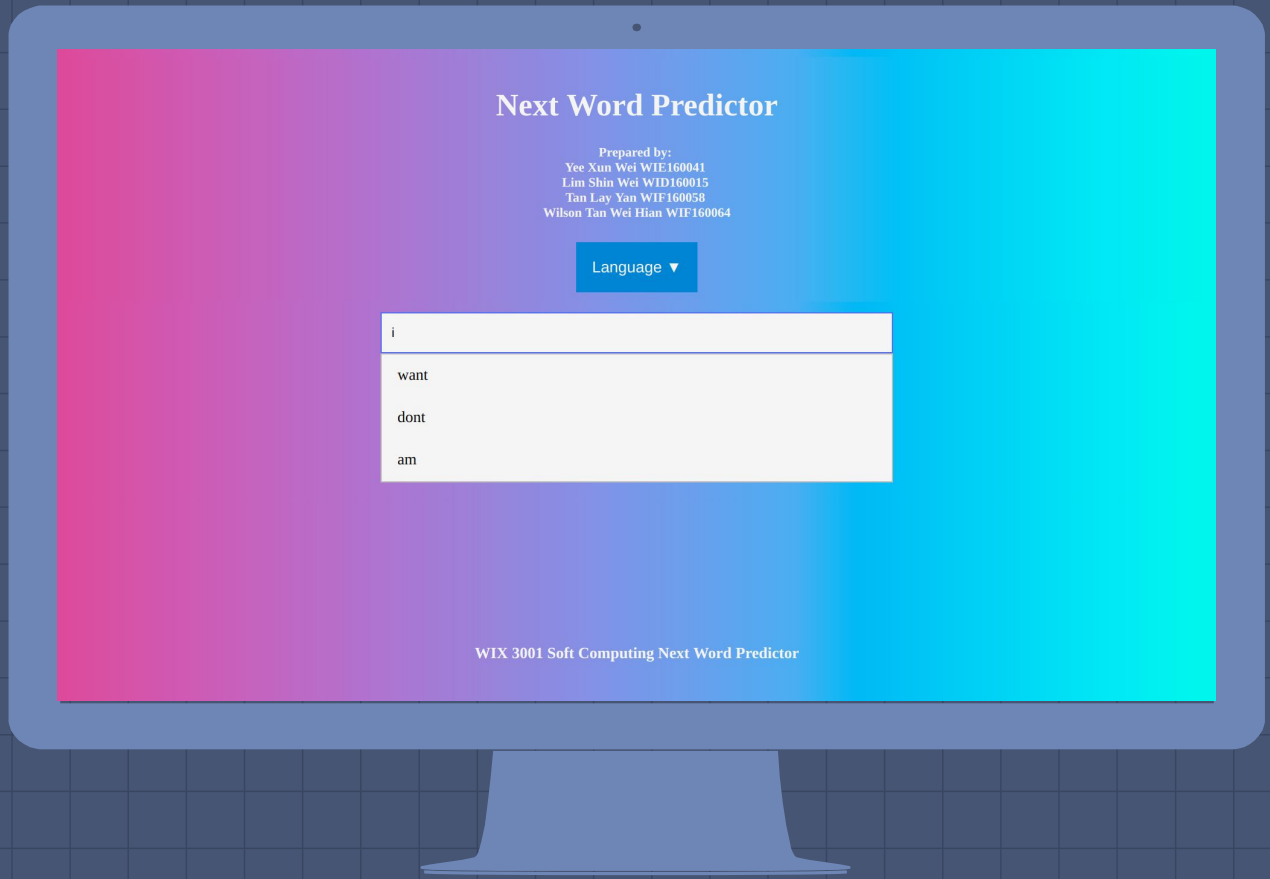
2

JavaScript and HTML

Powerful languages for frontend web development.

Application Website

Developed In pure HTML and JavaScript



BACK-END SERVICE AND API's

Python Django

Powerful backend framework for full stack web development

3

DEMO

View the source codes here:

https://github.com/shinw97/next-word-predictor

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THANKS!

Any questions?