



[< Back to Artificial Intelligence Nanodegree and Specializations](#)

# Machine Translation

REVIEW

CODE REVIEW

HISTORY

## Meets Specifications

Hi there!

Congratulations on successfully completing this project! 🎉👁

## Submitted Files

The following files have been submitted: `helper.py`, `machine_translation.ipynb`, `machine_translation.html`

All the needed files are included.

## Preprocess

The function `tokenize` returns tokenized input and the tokenized class.

Tokenizer correctly implemented.

The function `pad` returns padded input to the correct length.

Padding correctly implemented.

## Models

The function `simple_model` builds a basic RNN model.

Correct implementation 🎉

The function `embed_model` builds a RNN model using word embedding.

Correct implementation using embedding

The Embedding RNN is trained on the dataset. A prediction using the model on the training dataset is printed in the notebook.

Good prediction, great validation accuracy.

The function `bd_model` builds a bidirectional RNN model.

Correct implementation.

The Bidirectional RNN is trained on the dataset. A prediction using the model on the training dataset is printed in the notebook.

Good enough prediction, good validation accuracy.

The function `model_final` builds and trains a model that incorporates embedding, and bidirectional RNN using the dataset.

You did a great job building the final model using all the building blocks from the previous models.

## Prediction

The final model correctly predicts both sentences.

Great work by achieving to %97 of accuracy.

```
Epoch 6/10
110288/110288 [=====] - 39s 354us/step - loss: 0.1867 - acc: 0.9457 - val_loss: nan - val_acc: 0.9561
Epoch 7/10
110288/110288 [=====] - 39s 354us/step - loss: 0.1253 - acc: 0.9643 - val_loss: nan - val_acc: 0.9645
Epoch 8/10
110288/110288 [=====] - 39s 354us/step - loss: 0.1019 - acc: 0.9708 - val_loss: nan - val_acc: 0.9697
Epoch 9/10
110288/110288 [=====] - 39s 353us/step - loss: 0.1038 - acc: 0.9700 - val_loss: nan - val_acc: 0.9710
Epoch 10/10
110288/110288 [=====] - 39s 353us/step - loss: 0.0789 - acc: 0.9773 - val_loss: nan - val_acc: 0.9726
Sample 1:
il a vu un vieux camion jaune <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD>
Il a vu un vieux camion jaune
Sample 2:
new jersey est parfois calme pendant l' automne et il est neigeux en avril <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD>
new jersey est parfois calme pendant l' automne et il est neigeux en avril <PAD> <PAD> <PAD> <PAD> <PAD> <PAD> <PAD>
```

 [DOWNLOAD PROJECT](#)

[RETURN TO PATH](#)

Rate this review