

IDS 422: Homework 5

Due Nov 15, 2023

In Chapter 7, we constructed a Peeky Seq2seq model, implemented using the [PeekySeq2seq](#) class, and trained this model on the addition dataset to learn how to perform addition for two integers ranging from 0 to 999. This Seq2seq consists of two LSTM layers: an encoder's LSTM layer and a decoder's LSTM layer.

To built upon the previous homework where a [GRU-based model](#) was created, construct a [GRU-based PeekySeq2seq](#) model, which also comprises two GRU layers: an encoder's GRU and a decoder's GRU.

Train your [GRU-based PeekySeq2seq model](#) on the addition training data for 25 epochs (or more if you prefer), and evaluate its accuracy on the test data. Both the training and test datasets are provided in '[code/dataset](#)' directory.

Report the **test accuracy**.

You're encouraged to explore the "[reversing input data](#)" technique as an additional approach to enhance the model's performance and accuracy.