

# Homework 2, Due 11:59 p.m., July 30, 2021

MPCS 53113: Natural Language Processing

## Instructions:

- This assignment is designed to help you work at an advanced neural network based NLP task.
- Problems 1 is programming-based. For them, please run through and execute all of the cells of the attached Jupyter notebook (including the parts you added which are marked by **# TODO** and submit the notebook via Canvas.

1. (80 pts) **Neural Machine Translation.** In this problem we will be implementing the model described in [1]. Please consult the python notebook provided with this homework for more details. The missing code is marked with **#TODO**.

## References

- [1] Kyunghyun Cho, Bart Van Merriënboer, Caglar Gulcehre, Dzmitry Bahdanau, Fethi Bougares, Holger Schwenk, and Yoshua Bengio. Learning phrase representations using rnn encoder-decoder for statistical machine translation. *arXiv preprint arXiv:1406.1078*, 2014.