

# STAT 760 Homework 6

Wednesday, March 29, 2022

**Exercise 1.** (Programming)– **12 pts**

Implement a linear regression on California 1990 Housing Value dataset via neural network by PyTorch without `nn.Module`. Write your own loss function and forward function. The data `Housing.csv` can be downloaded from the website <https://www.kaggle.com/datasets/harrywang/housing>.

**Exercise 2.** (programming) – **18 pts**

Write a Python programming to classify 7 classes from the CIFAR-10 dataset. The seven classes are automobile (1), cat (3), dog (5), frog (6), horse (7), ship (8), and truck (9). Please use the PyTorch library to model your neural network with `nn.Module` and show the accuracy of each class and the total accuracy.