Assignment 2

Tingjun Yuan

***Abstract*—This assignment is mainly based on the knowledge of Attention Mechanisms and Graph Neural Networks (GNN). The dataset is generally based on a pedestrian trajectory recorded in a mall. The models trained in the assignment predict the positions of the pedestrians. This assignment first trains a GNN model according to a tutorial, but reimplemented with PyTorch. After training, the model is evaluated with the main squared error (MSE), the mean Euclidean distance, and the plot graphs. Next, the model is reexamined by tuning hyperparameters, trying a deeper embedding, and replacing the learned attention mechanism.**

I. Result and Evaluation

A. Task 1