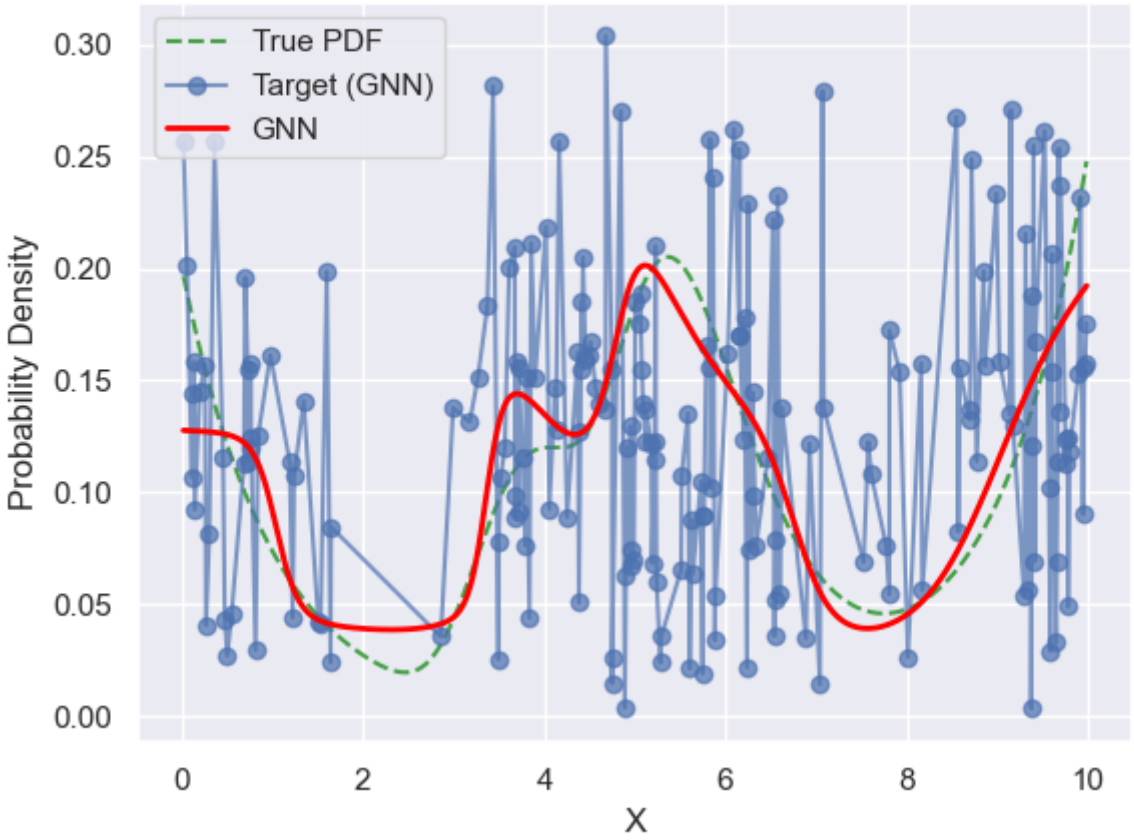
Experiment Details Experiment C11 S250

> from experiment with GNN on 2024-05-23 16-31

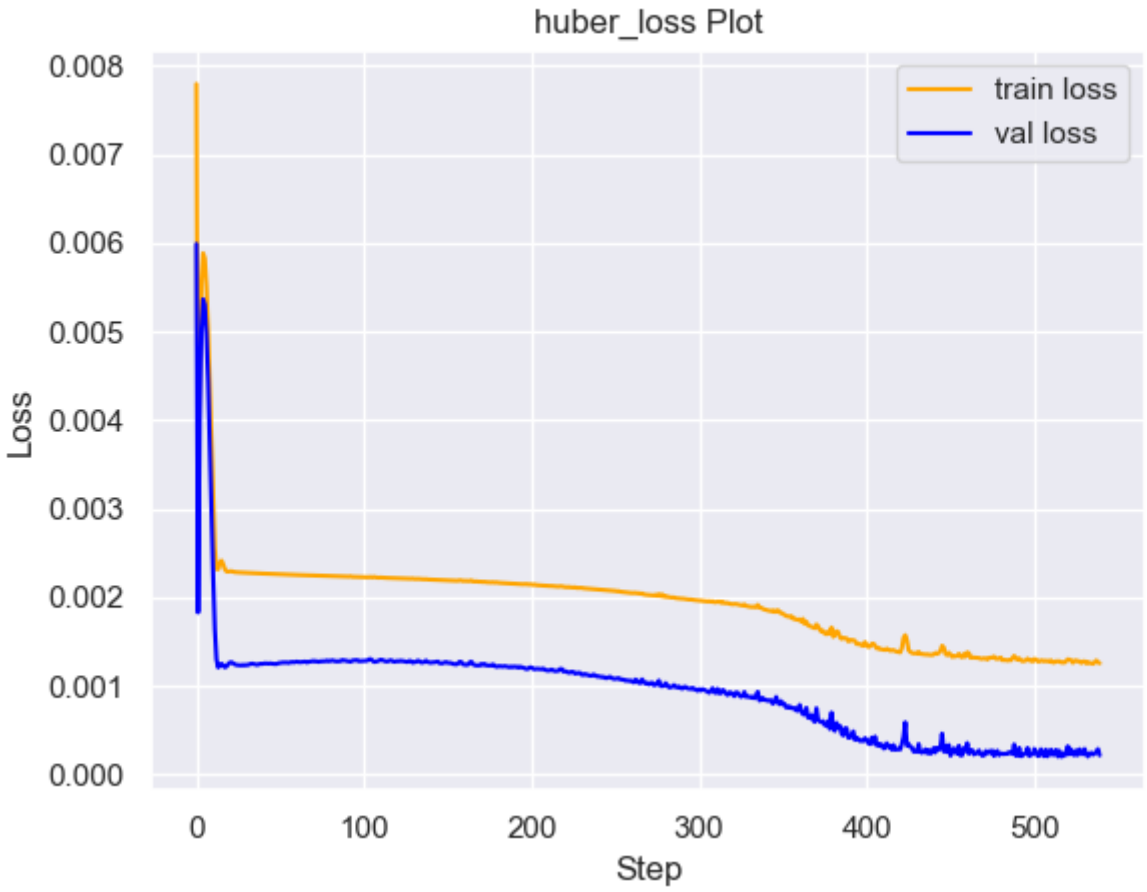
Metrics:

type	r2	mse	max_error	ise	kl	evs
Target	-0.27649104	0.0033382155	0.2110728598	0.006676431	0.1144209164	-0.2729617878
Model	0.9144	0.0003	0.069	0.027	0.0129	0.9176

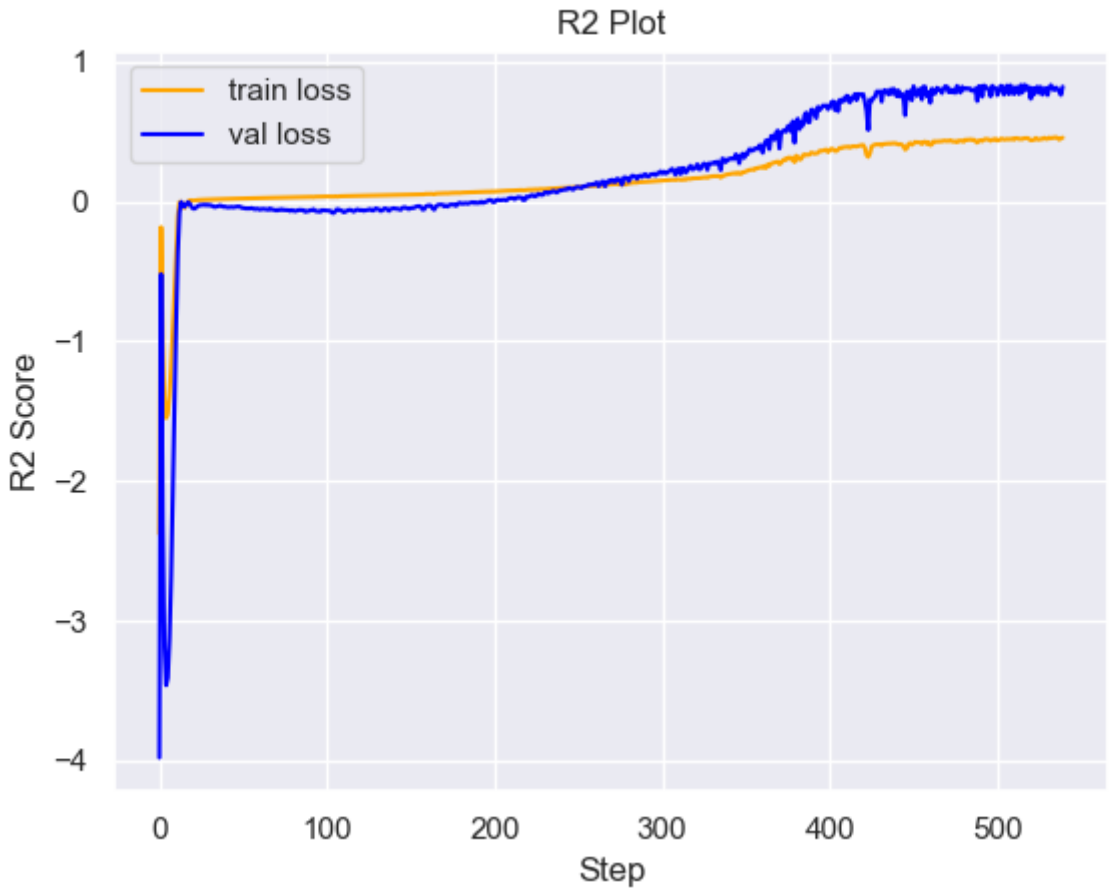
Plot Prediction



Loss Plot



Training Metric Plot



Dataset

▶ PDF set as default **MULTIVARIATE_1254**

Dimension 1

type	rate	weight	
exponential	1	0.2	
logistic	4	0.8	0.25
logistic	5.5	0.7	0.3
exponential	-1	0.25	-10

KEY	VALUE
dimension	1
seed	31
n_samples_training	200
n_samples_test	9973
n_samples_val	50

notes

Target

- Using GNN Target

▶ All Params used in the model for generate the target for the MLP

KEY	VALUE
n_init	20
max_iter	100
n_components	11
random_state	45
init_params	k-means++

Model

> using model GNN

Model Params:

▶ All Params used in the model

KEY	VALUE

KEY	VALUE
dropout	0.0
hidden_layer	[(28, Tanh()), (20, Sigmoid()), (34, Sigmoid()), (26, Tanh())]
last_activation	lambda

▶ Model Architecture

NeuralNetworkModular((dropout): Dropout(p=0.0, inplace=False) (output_layer): Linear(in_features=26, out_features=1, bias=True) (last_activation): AdaptiveSigmoid((sigmoid): Sigmoid()) (layers): ModuleList((0): Linear(in_features=1, out_features=28, bias=True) (1): Linear(in_features=28, out_features=20, bias=True) (2): Linear(in_features=20, out_features=34, bias=True) (3): Linear(in_features=34, out_features=26, bias=True) (4): AdaptiveSigmoid((sigmoid): Sigmoid())) (activation): ModuleList((0): Tanh() (1-2): 2 x Sigmoid() (3): Tanh()))

Training

▶ All Params used for the training

KEY	VALUE
learning_rate	0.003454947958915411
epochs	540
loss_type	huber_loss
optimizer	Adam
batch_size	52