Experiment Details Experiment C7 S150
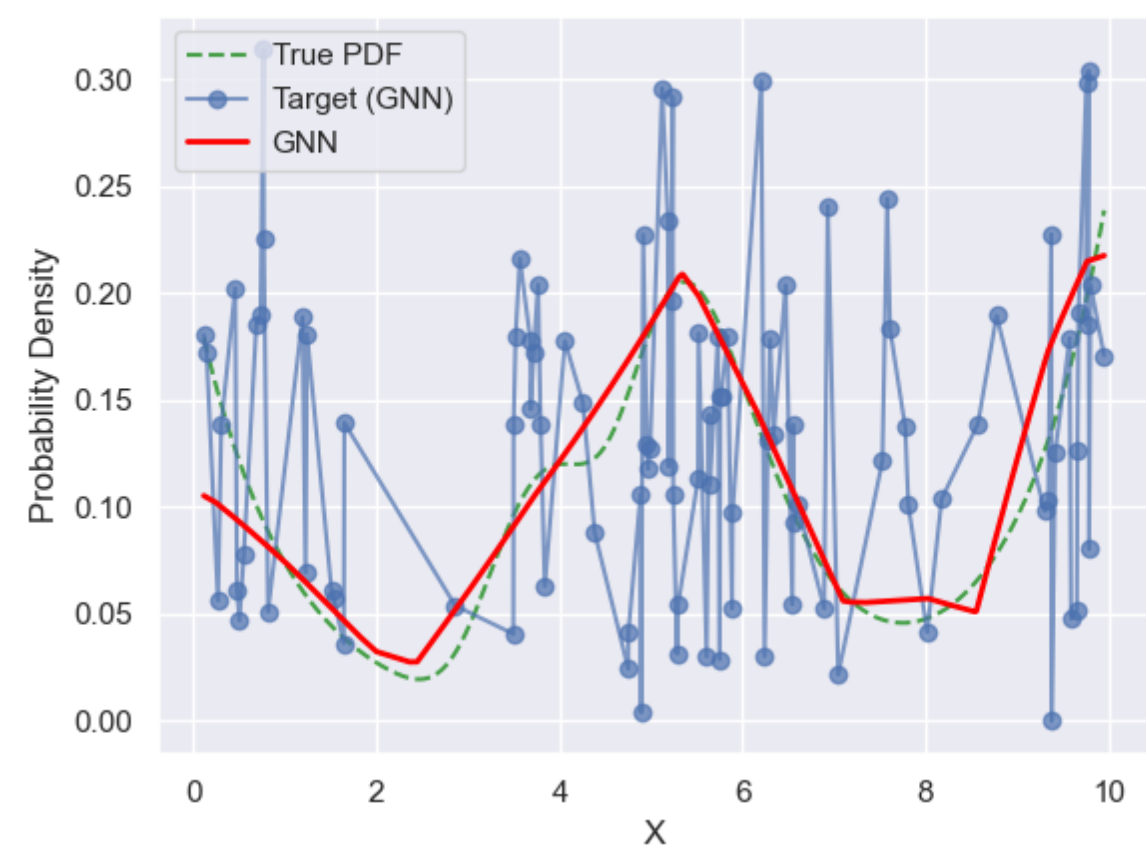
> from experiment with GNN on 2024-05-23 16-20

Metrics:

type	r2	mse	max_error	ise	kl	evs
Target	0.0077618145	0.0028498968	0.1973881326	0.0028498968	0.1215398778	0.0094143431
Model	0.9054	0.0003	0.0738	0.0284	0.013	0.9136

Plot Prediction

Loss Plot

mse_loss Plot

Training Metric Plot

R2 Plot
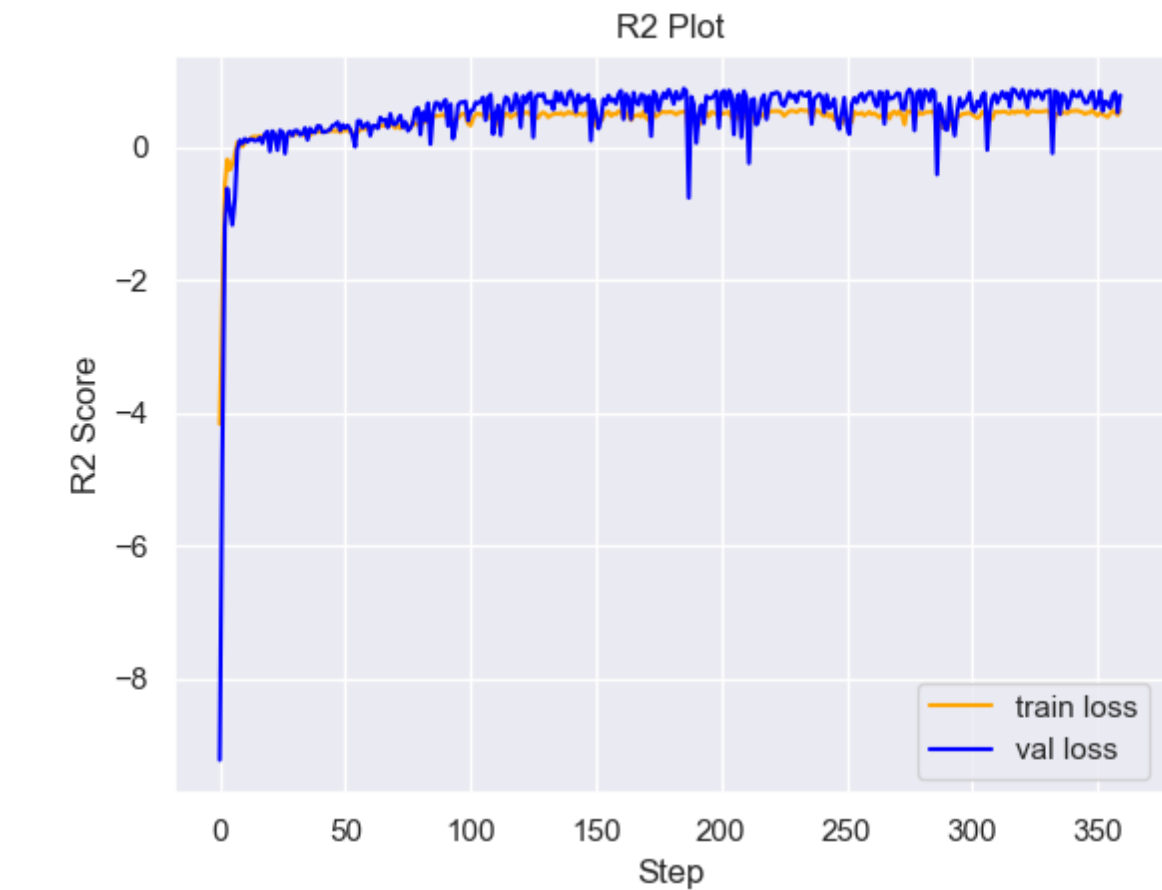
Dataset

▶ 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	98
n_samples_training	100
n_samples_test	9840
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	10
max_iter	30
n_components	7
random_state	62
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	[(54, Sigmoid()), (26, Tanh()), (24, Tanh()), (54, ReLU())]
last_activation	None

▶ Model Architecture

NeuralNetworkModular((dropout): Dropout(p=0.0, inplace=False) (output_layer): Linear(in_features=54, out_features=1, bias=True) (layers): ModuleList((0): Linear(in_features=1, out_features=54, bias=True) (1): Linear(in_features=54, out_features=26, bias=True) (2): Linear(in_features=26, out_features=24, bias=True) (3): Linear(in_features=24, out_features=54, bias=True)) (activation): ModuleList((0): Sigmoid() (1-2): 2 x Tanh() (3): ReLU()))

Training

▶ All Params used for the training

KEY	VALUE
learning_rate	0.00266
epochs	360
loss_type	mse_loss
optimizer	Adam
batch_size	40