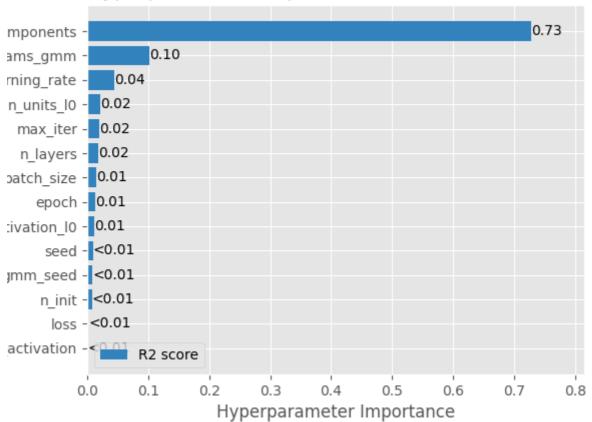
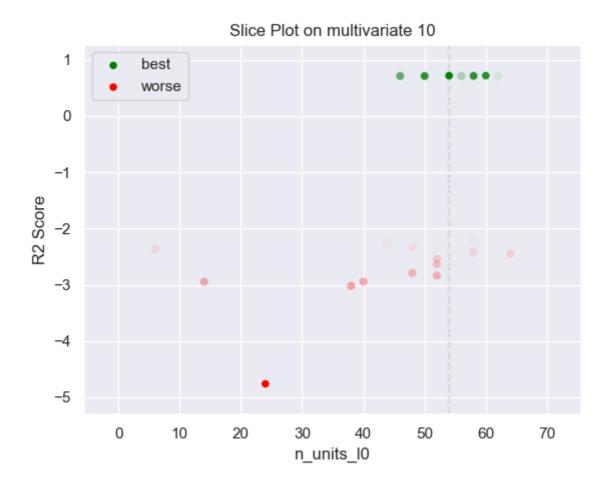
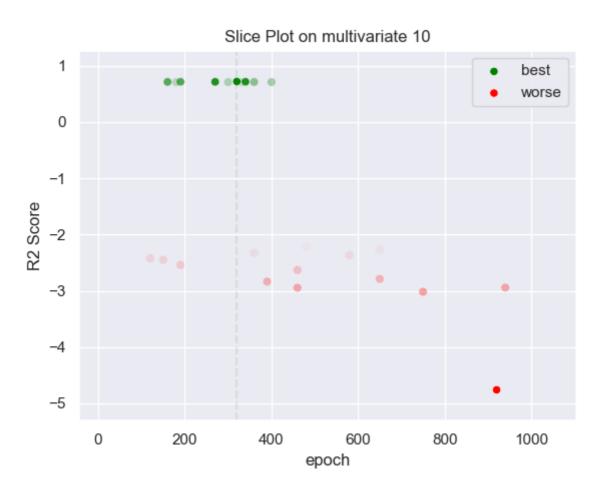
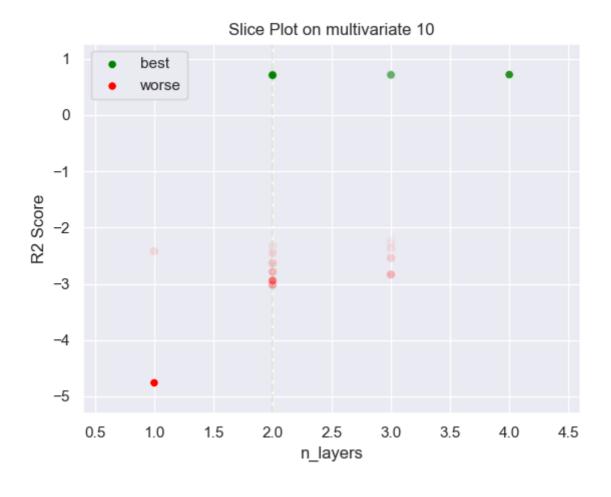
# MLP GMM 10 multivariate

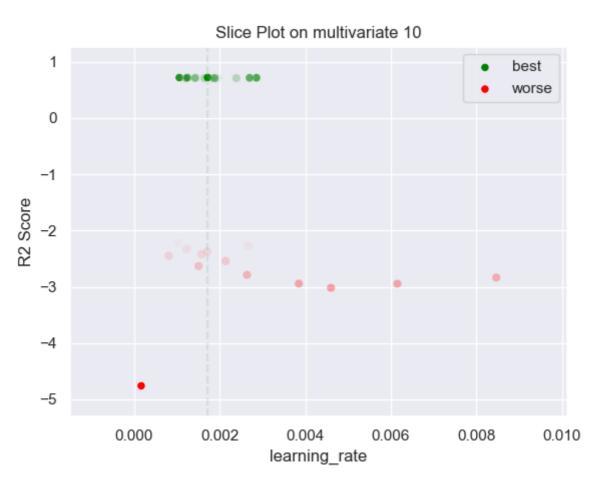
# Hyperparameter Importances

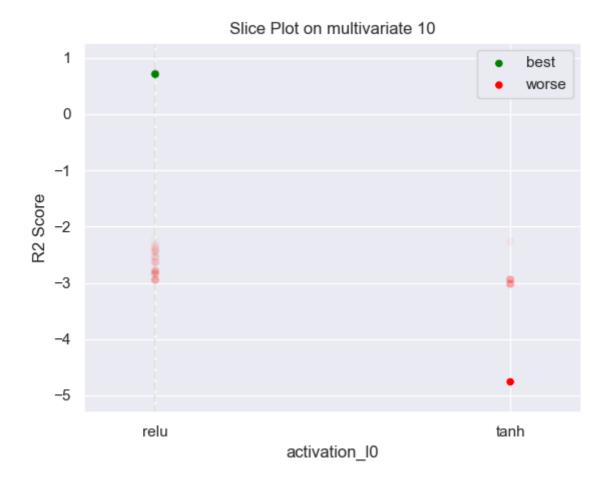


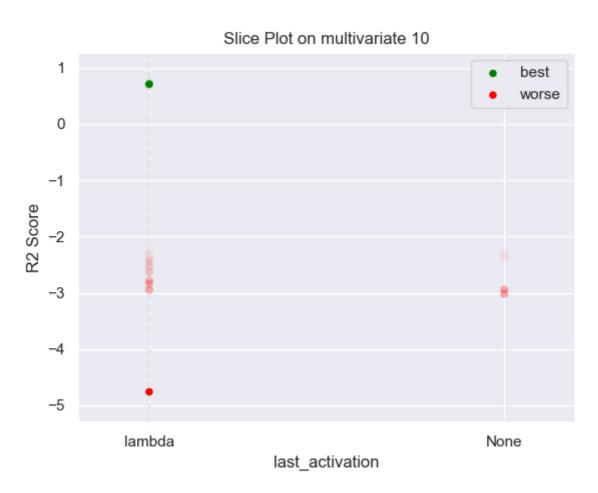


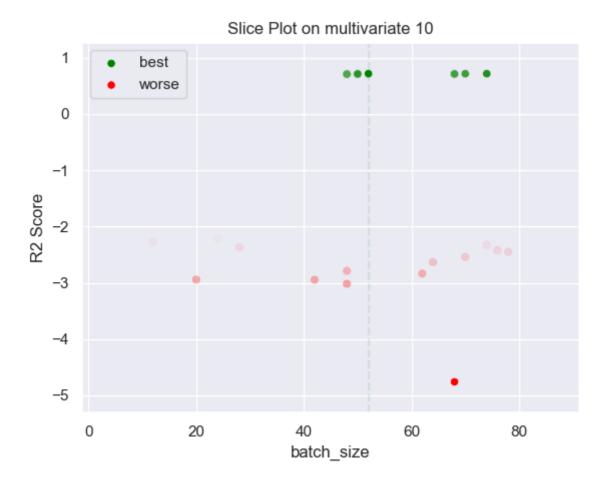


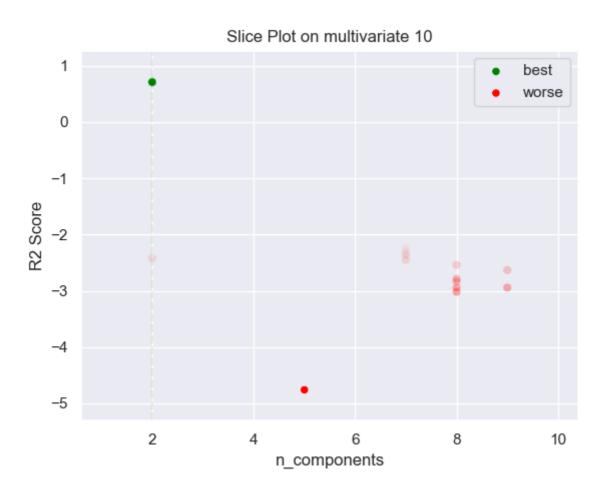












#### • R2 score: **0.72235172**

seed: 42n\_init: 70

• max\_iter : 10

n\_components: 2gmm\_seed: 37

• init\_params\_gmm : k-means++

n\_layers : 2n\_units\_I0 : 54activation\_I0 : ...

activation\_IO : relun\_units\_I1 : 30

activation\_I1 : tanhlast\_activation : lambda

• learning\_rate: 0.0017200000000000002

epoch: 320loss: mse\_lossbatch\_size: 52

#### • R2 score: 0.72005721

seed: 45n\_init: 90

• max\_iter : 60

n\_components: 2gmm\_seed: 53

• init\_params\_gmm : kmeans

n\_layers : 4n\_units\_I0 : 60

• activation\_IO: relu

• **n\_units\_I1**: 32

• activation\_I1 : tanh

o n\_units\_I2 : 10

• activation\_I2 : tanh

o n\_units\_I3:46

o activation\_I3: tanh

o last\_activation : lambda

epoch: 340loss: mse\_lossbatch\_size: 74

# • R2 score: **0.71840077**

seed: 46n\_init: 70max\_iter: 10

• n\_components : 2

• **gmm\_seed**: 50

o init\_params\_gmm : k-means++

 $\circ$  n\_layers : 2

• n\_units\_I0 : 58

o activation\_IO: relu

o n\_units\_l1: 26

o activation\_I1: tanh

• last\_activation : lambda

• learning\_rate : 0.00125

epoch : 270loss : mse\_loss

• batch\_size: 70

#### WORST 3

• R2 score: -4.76029849

o seed: 42

o n\_init: 70

• max\_iter : 10

o n\_components: 2

• **gmm\_seed**: *37* 

• init\_params\_gmm : k-means++

• **n\_layers** : 2

o n\_units\_I0: 54

• activation\_IO: relu

o n\_units\_I1:30

o activation\_I1: tanh

o last\_activation: lambda

• learning\_rate: 0.0017200000000000002

epoch: 320loss: mse\_lossbatch\_size: 52

# • R2 score: -3.01763135

o seed: 45

o n\_init: 90

o max\_iter: 60

• n\_components : 2

o gmm\_seed: 53

• init\_params\_gmm : kmeans

o n\_layers: 4

o n\_units\_I0: 60

o activation\_IO: relu

o n\_units\_l1: 32

• activation\_I1 : tanh

o n\_units\_I2: 10

o activation\_I2: tanh

o n\_units\_I3:46

o activation\_I3: tanh

o last\_activation : lambda

• learning\_rate: 0.00106000000000000002

epoch: 340loss: mse\_lossbatch\_size: 74

### • R2 score: -2.94629605

seed: 46n\_init: 70

• max\_iter : 10

n\_components: 2gmm\_seed: 50

• init\_params\_gmm : k-means++

• **n\_layers** : *2* 

• n\_units\_I0 : 58

• activation\_IO : relu

o n\_units\_I1: 26

• activation\_I1 : tanh

last\_activation : lambdalearning\_rate : 0.00125

epoch: 270
loss: mse\_loss
batch\_size: 70