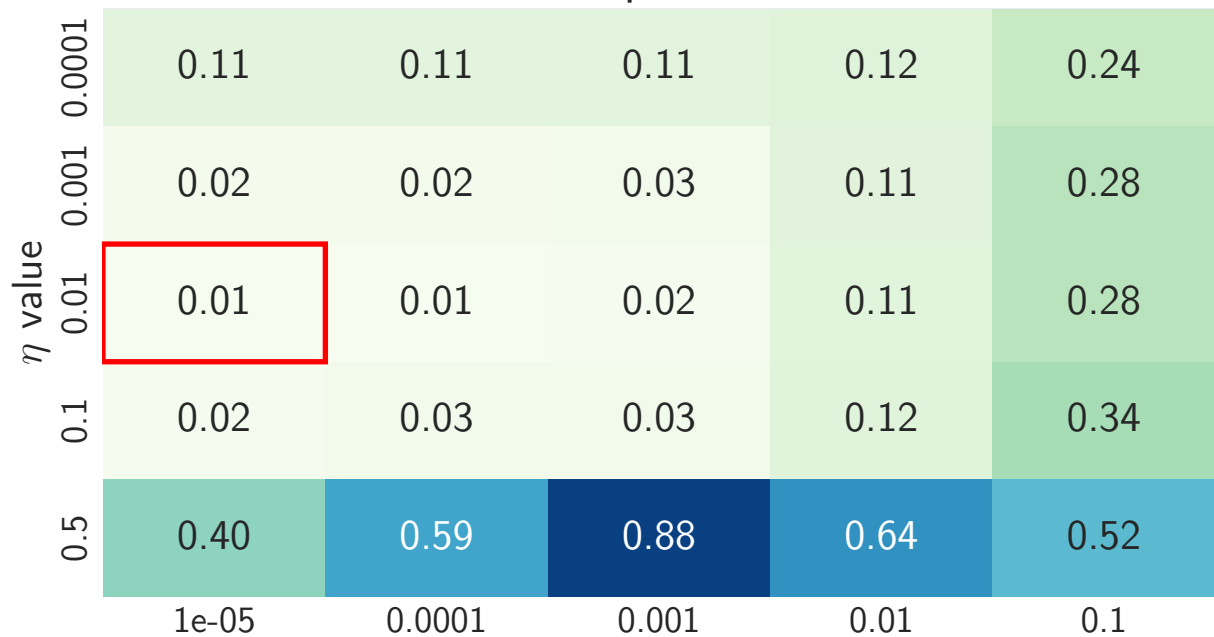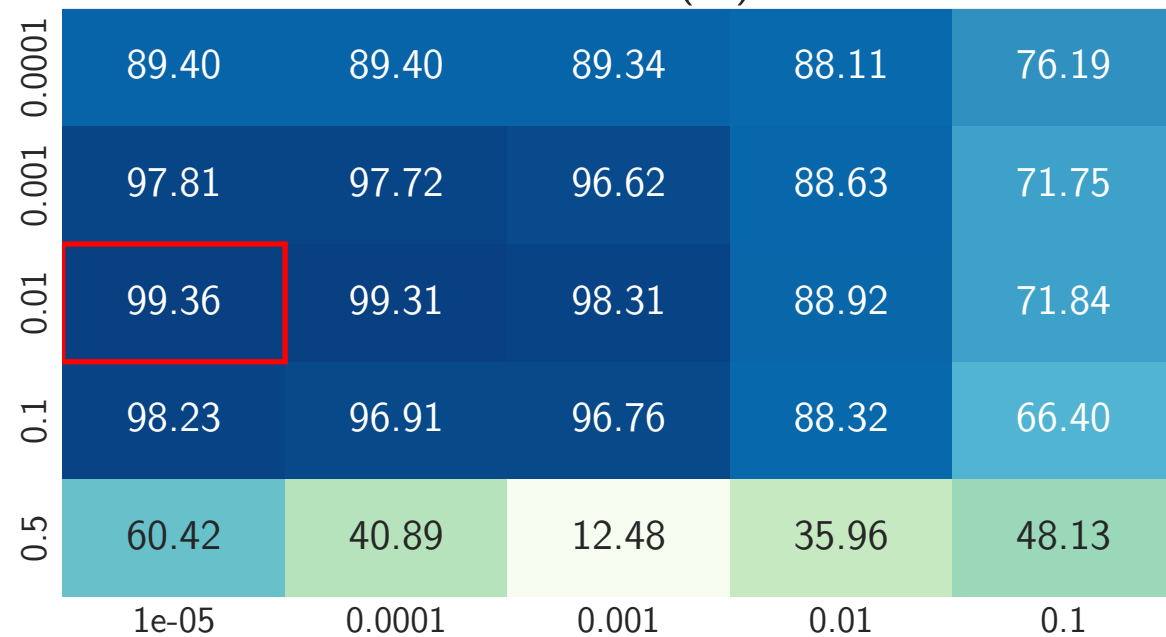Neural network performance as a function of learning rate and regularization parameter

Mean Squared Error

η value	1e-05	0.0001	0.001	0.01	0.1
0.0001	0.11	0.11	0.11	0.12	0.24
0.001	0.02	0.02	0.03	0.11	0.28
0.01	0.01	0.01	0.02	0.11	0.28
0.1	0.02	0.03	0.03	0.12	0.34
0.5	0.40	0.59	0.88	0.64	0.52

R^2 Score (%)

η value	1e-05	0.0001	0.001	0.01	0.1
0.0001	89.40	89.40	89.34	88.11	76.19
0.001	97.81	97.72	96.62	88.63	71.75
0.01	99.36	99.31	98.31	88.92	71.84
0.1	98.23	96.91	96.76	88.32	66.40
0.5	60.42	40.89	12.48	35.96	48.13

λ value