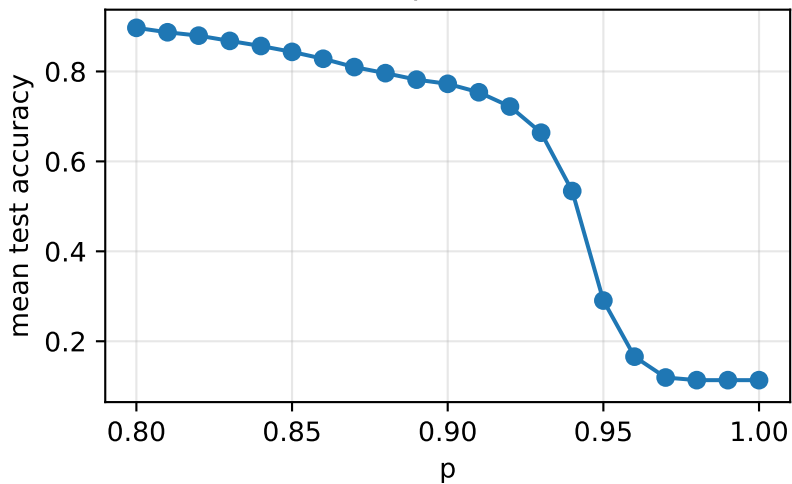
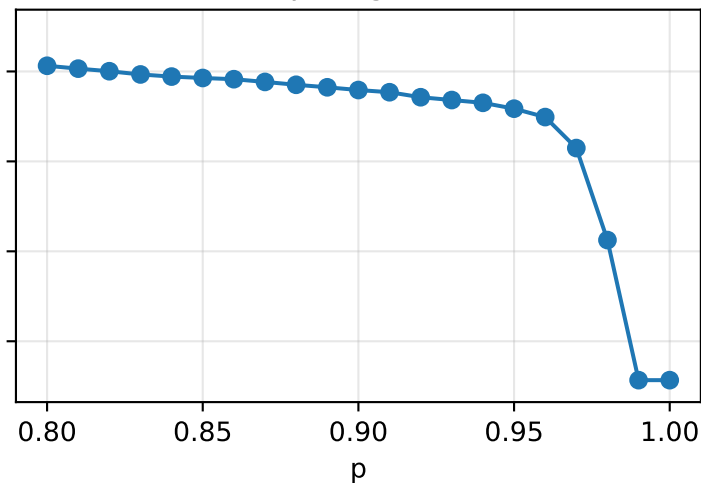


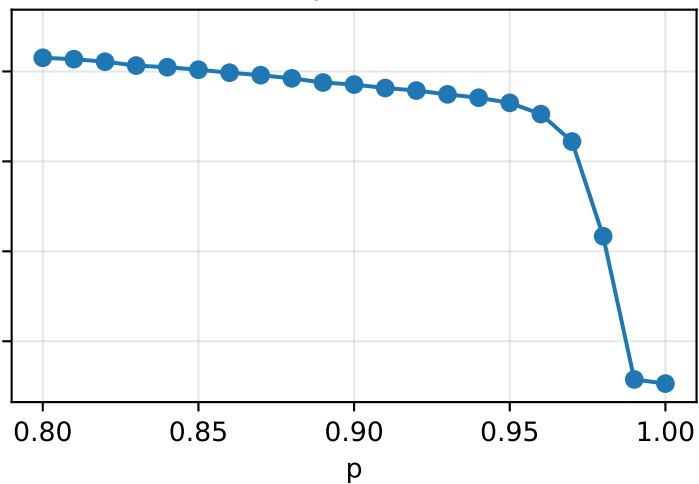
mlp / relu



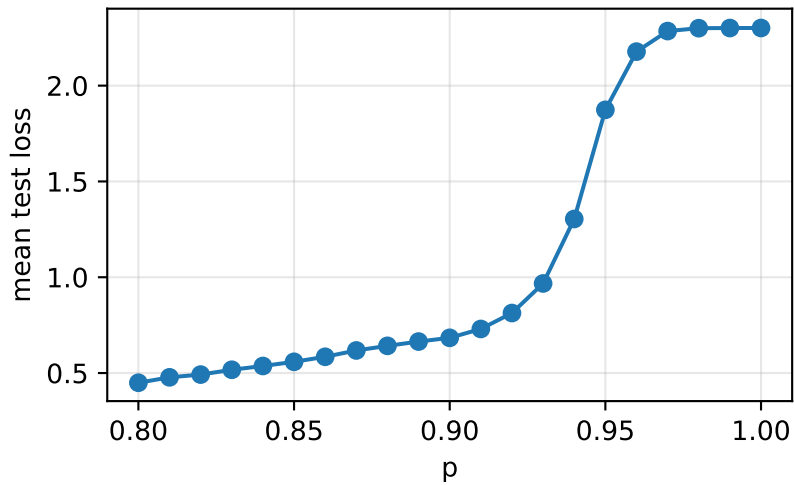
mlp / sigmoid



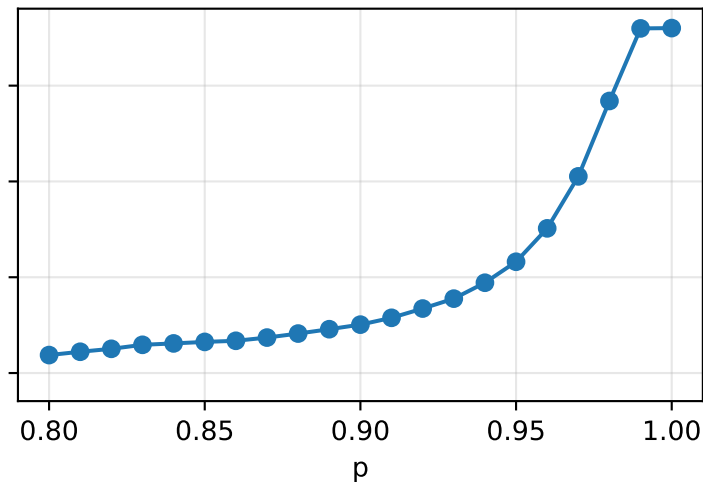
mlp / tanh



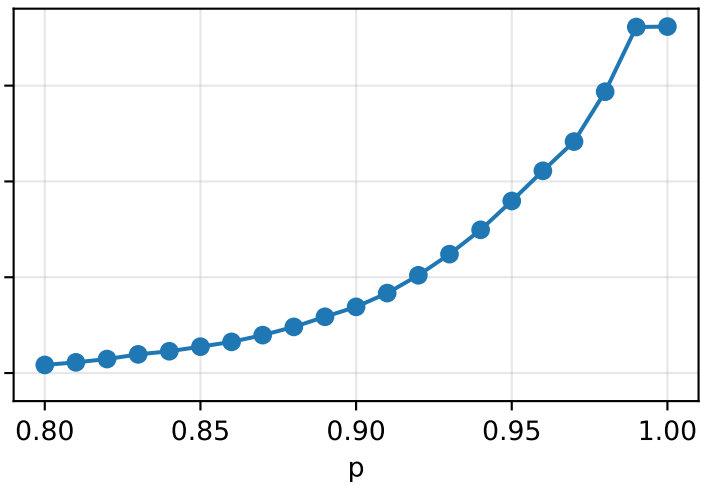
mlp / relu



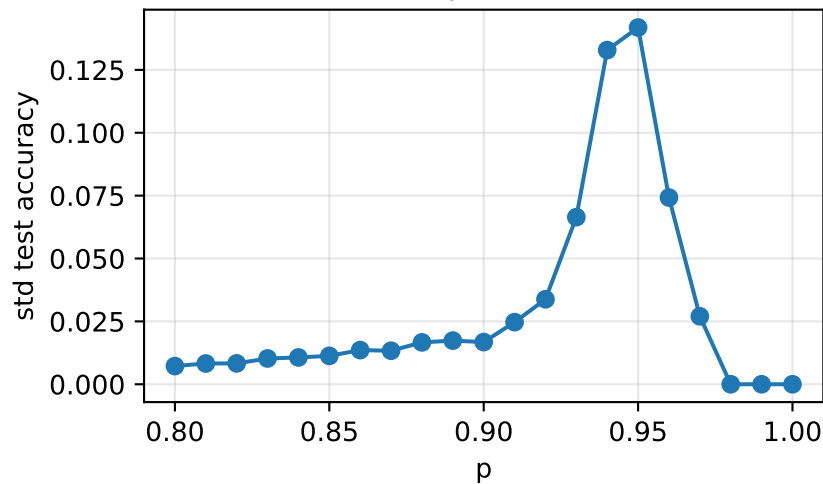
mlp / sigmoid



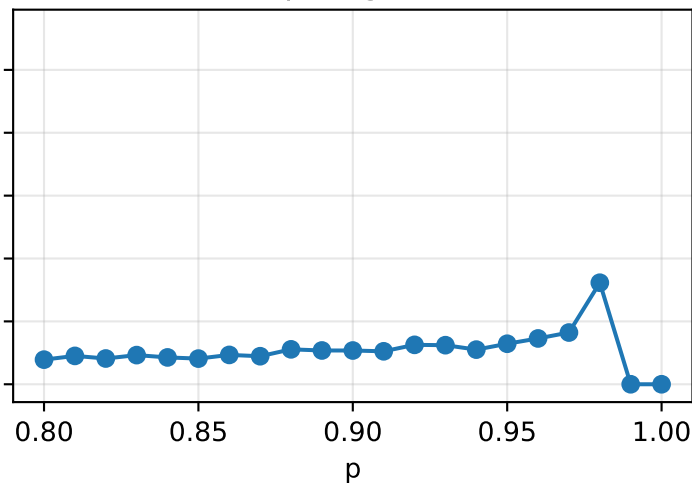
mlp / tanh



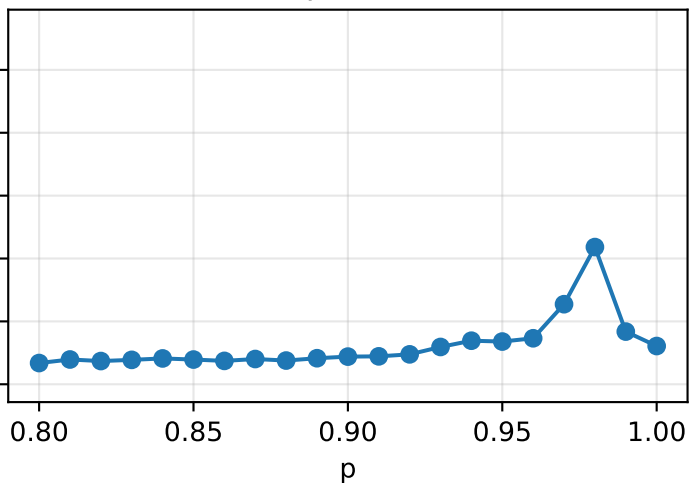
mlp / relu



mlp / sigmoid



mlp / tanh



## Results Summary

activation	model type	p	repeats	mean test accuracy	std test accuracy	stderr test accuracy	mean test loss	std test loss	stderr test loss
relu	mip	0.800	100	0.8970	0.0072	0.0007	0.4493	0.0267	0.0027
relu	mip	0.810	100	0.8871	0.0083	0.0008	0.4776	0.0280	0.0028
relu	mip	0.820	100	0.8796	0.0083	0.0008	0.4920	0.0311	0.0031
relu	mip	0.830	100	0.8679	0.0103	0.0010	0.5171	0.0353	0.0035
relu	mip	0.840	100	0.8566	0.0107	0.0011	0.5368	0.0334	0.0033
relu	mip	0.850	100	0.8435	0.0113	0.0011	0.5585	0.0347	0.0035
relu	mip	0.860	100	0.8282	0.0136	0.0014	0.5848	0.0338	0.0034
relu	mip	0.870	100	0.8097	0.0133	0.0013	0.6178	0.0370	0.0037
relu	mip	0.880	100	0.7962	0.0167	0.0017	0.6419	0.0473	0.0047
relu	mip	0.890	100	0.7818	0.0174	0.0017	0.6643	0.0429	0.0043
relu	mip	0.900	100	0.7725	0.0168	0.0017	0.6838	0.0413	0.0041
relu	mip	0.910	100	0.7537	0.0247	0.0025	0.7300	0.0585	0.0059
relu	mip	0.920	100	0.7220	0.0338	0.0034	0.8133	0.0774	0.0077
relu	mip	0.930	100	0.6638	0.0664	0.0066	0.9675	0.1600	0.0160
relu	mip	0.940	100	0.5340	0.1329	0.0133	1.3040	0.3196	0.0320
relu	mip	0.950	100	0.2905	0.1418	0.0142	1.8737	0.3337	0.0334
relu	mip	0.960	100	0.1657	0.0742	0.0074	2.1775	0.1644	0.0164
relu	mip	0.970	100	0.1194	0.0270	0.0027	2.2848	0.0622	0.0062
relu	mip	0.980	100	0.1135	0.0000	0.0000	2.2999	0.0017	0.0002
relu	mip	0.990	100	0.1135	0.0000	0.0000	2.3007	0.0004	0.0000
relu	mip	1.000	100	0.1135	0.0000	0.0000	2.3009	0.0002	0.0000
sigmoid	mip	0.800	100	0.8126	0.0098	0.0010	0.5938	0.0308	0.0031
sigmoid	mip	0.810	100	0.8063	0.0113	0.0011	0.6111	0.0305	0.0031
sigmoid	mip	0.820	100	0.8005	0.0102	0.0010	0.6264	0.0287	0.0029
sigmoid	mip	0.830	100	0.7933	0.0116	0.0012	0.6473	0.0343	0.0034
sigmoid	mip	0.840	100	0.7886	0.0107	0.0011	0.6546	0.0273	0.0027
sigmoid	mip	0.850	100	0.7855	0.0102	0.0010	0.6625	0.0239	0.0024
sigmoid	mip	0.860	100	0.7828	0.0117	0.0012	0.6683	0.0260	0.0026
sigmoid	mip	0.870	100	0.7767	0.0112	0.0011	0.6851	0.0232	0.0023
sigmoid	mip	0.880	100	0.7704	0.0139	0.0014	0.7060	0.0250	0.0025
sigmoid	mip	0.890	100	0.7648	0.0134	0.0013	0.7288	0.0230	0.0023
sigmoid	mip	0.900	100	0.7587	0.0134	0.0013	0.7526	0.0206	0.0021
sigmoid	mip	0.910	100	0.7538	0.0131	0.0013	0.7882	0.0215	0.0022
sigmoid	mip	0.920	100	0.7427	0.0157	0.0016	0.8366	0.0243	0.0024
sigmoid	mip	0.930	100	0.7364	0.0155	0.0016	0.8883	0.0233	0.0023
sigmoid	mip	0.940	100	0.7302	0.0138	0.0014	0.9713	0.0206	0.0021
sigmoid	mip	0.950	100	0.7172	0.0161	0.0016	1.0808	0.0251	0.0025
sigmoid	mip	0.960	100	0.6985	0.0182	0.0018	1.2552	0.0375	0.0038
sigmoid	mip	0.970	100	0.6296	0.0206	0.0021	1.5264	0.0292	0.0029
sigmoid	mip	0.980	100	0.4250	0.0404	0.0040	1.9199	0.0326	0.0033
sigmoid	mip	0.990	100	0.1135	0.0000	0.0000	2.2987	0.0024	0.0002
sigmoid	mip	1.000	100	0.1135	0.0000	0.0000	2.3004	0.0006	0.0001
tanh	mip	0.800	100	0.8303	0.0084	0.0008	0.5422	0.0186	0.0019
tanh	mip	0.810	100	0.8273	0.0099	0.0010	0.5558	0.0224	0.0022
tanh	mip	0.820	100	0.8216	0.0092	0.0009	0.5730	0.0189	0.0019
tanh	mip	0.830	100	0.8131	0.0097	0.0010	0.5974	0.0195	0.0019
tanh	mip	0.840	100	0.8094	0.0103	0.0010	0.6137	0.0194	0.0019
tanh	mip	0.850	100	0.8039	0.0098	0.0010	0.6376	0.0187	0.0019
tanh	mip	0.860	100	0.7972	0.0093	0.0009	0.6626	0.0200	0.0020
tanh	mip	0.870	100	0.7917	0.0100	0.0010	0.6979	0.0179	0.0018
tanh	mip	0.880	100	0.7847	0.0094	0.0009	0.7408	0.0156	0.0016
tanh	mip	0.890	100	0.7753	0.0104	0.0010	0.7936	0.0175	0.0017
tanh	mip	0.900	100	0.7709	0.0110	0.0011	0.8453	0.0189	0.0019
tanh	mip	0.910	100	0.7631	0.0111	0.0011	0.9173	0.0182	0.0018
tanh	mip	0.920	100	0.7575	0.0119	0.0012	1.0102	0.0206	0.0021
tanh	mip	0.930	100	0.7490	0.0148	0.0015	1.1205	0.0238	0.0024
tanh	mip	0.940	100	0.7416	0.0173	0.0017	1.2474	0.0198	0.0020
tanh	mip	0.950	100	0.7301	0.0170	0.0017	1.3980	0.0266	0.0027
tanh	mip	0.960	100	0.7051	0.0183	0.0018	1.5554	0.0396	0.0040
tanh	mip	0.970	100	0.6441	0.0318	0.0032	1.7080	0.0402	0.0040
tanh	mip	0.980	100	0.4336	0.0545	0.0055	1.9684	0.0307	0.0031
tanh	mip	0.990	100	0.1151	0.0209	0.0021	2.3060	0.0037	0.0004
tanh	mip	1.000	100	0.1059	0.0152	0.0015	2.3082	0.0035	0.0004

## Run Metadata

timestamp: 2026-01-24 07:01:03  
activations: ['relu', 'tanh', 'sigmoid']  
model\_types: ['mlp']  
model\_hparams: {'mlp': {'hidden\_layer\_count': 2, 'hidden\_sizes': [256, 128]}}  
ps: [0.8 0.81 0.82 0.83 0.84 0.85 0.86 0.87 0.88 0.89 0.9 0.91 0.92 0.93  
0.94 0.95 0.96 0.97 0.98 0.99 1. ]  
repeats: 100  
epochs: 20  
batch\_size: 128  
learning\_rate: 0.001  
weight\_decay: 0.0  
max\_workers: 10  
data\_workers: 2  
cpu\_threads\_per\_worker: 1  
output\_dir: results  
seed: 1234  
max\_train\_samples: None  
use\_cuda: False  
total\_runs: 6300