

1 Table of results for BPIC15

Dataset	Model	Loss	Activation	Units	Mean	Sd
BPIC15	LSTM	MSE	tanh	30	0.88249	0.00662
BPIC15	GRU	Binary-CrossEntropy	sigmoid	30	0.87788	0.01041
BPIC15	GRU	MSE	tanh	30	0.87066	0.01096
BPIC15	GRU	MSE	sigmoid	30	0.86642	0.01323
BPIC15	LSTM	MSE	sigmoid	30	0.86265	0.01275
BPIC15	LSTM	MSE	tanh	10	0.85379	0.00944
BPIC15	GRU	Binary-CrossEntropy	sigmoid	10	0.85247	0.00866
BPIC15	GRU	MSE	sigmoid	10	0.84064	0.01247
BPIC15	GRU	MSE	tanh	10	0.83342	0.0113
BPIC15	LSTM	Binary-CrossEntropy	sigmoid	10	0.83151	0.02353
BPIC15	LSTM	MSE	tanh	5	0.82509	0.01872
BPIC15	LSTM	MSE	sigmoid	5	0.81873	0.01003
BPIC15	GRU	Binary-CrossEntropy	sigmoid	5	0.81215	0.01637
BPIC15	LSTM	Binary-CrossEntropy	sigmoid	5	0.80175	0.0442
BPIC15	GRU	MSE	sigmoid	5	0.80069	0.02495
BPIC15	LSTM	Manhattan	tanh	30	0.79915	0.0115
BPIC15	GRU	MSE	tanh	5	0.79772	0.01142
BPIC15	LSTM	Binary-CrossEntropy	sigmoid	30	0.79342	0.11741
BPIC15	LSTM	MSE	sigmoid	10	0.77724	0.18222
BPIC15	GRU	Binary-CrossEntropy	tanh	30	0.77241	0.04023
BPIC15	GRU	Weight_Jaccard	sigmoid	30	0.76111	0.03611
BPIC15	GRU	Manhattan	tanh	30	0.74525	0.01532
BPIC15	GRU	Binary-CrossEntropy	tanh	10	0.72727	0.03649
BPIC15	LSTM	Binary-CrossEntropy	tanh	5	0.70785	0.04319
BPIC15	LSTM	Binary-CrossEntropy	tanh	30	0.70525	0.08426
BPIC15	GRU	BinCrossEntropyLogits	tanh	10	0.70451	0.11826
BPIC15	GRU	Weight_Jaccard	sigmoid	10	0.67459	0.15871
BPIC15	GRU	BinCrossEntropyLogits	tanh	30	0.64812	0.13223
BPIC15	GRU	Weight_Jaccard	sigmoid	5	0.64085	0.07848
BPIC15	LSTM	Binary-CrossEntropy	tanh	10	0.6391	0.17091
BPIC15	LSTM	Manhattan	tanh	10	0.61098	0.12063
BPIC15	LSTM	Weight_Jaccard	sigmoid	5	0.60732	0.17309
BPIC15	GRU	BinCrossEntropyLogits	tanh	5	0.60541	0.0601
BPIC15	LSTM	Weight_Jaccard	sigmoid	10	0.59883	0.16219
BPIC15	LSTM	Weight_Jaccard	tanh	30	0.59576	0.12769
BPIC15	GRU	Binary-CrossEntropy	tanh	5	0.59146	0.07846
BPIC15	LSTM	BinCrossEntropyLogits	tanh	10	0.58027	0.21217
BPIC15	GRU	Weight_Jaccard	tanh	30	0.56859	0.05841
BPIC15	LSTM	Weight_Jaccard	tanh	10	0.54976	0.12874
BPIC15	GRU	Weight_Jaccard	tanh	10	0.53772	0.05461
BPIC15	LSTM	Weight_Jaccard	sigmoid	30	0.50721	0.21029
BPIC15	LSTM	BinCrossEntropyLogits	tanh	5	0.49973	0.17092
BPIC15	LSTM	Weight_Jaccard	tanh	5	0.433	0.13188
BPIC15	GRU	Manhattan	tanh	5	0.42546	0.1307
BPIC15	GRU	Weight_Jaccard	tanh	5	0.42546	0.1307
BPIC15	GRU	Manhattan	tanh	10	0.40403	0.07322
BPIC15	LSTM	Manhattan	sigmoid	5	0.31692	0.09032
BPIC15	GRU	Manhattan	sigmoid	5	0.29093	0.09808
BPIC15	GRU	BinCrossEntropyLogits	sigmoid	5	0.28981	0.10005
BPIC15	LSTM	Manhattan	sigmoid	10	0.27963	0.09658

BPIC15	LSTM	BinCrossEntropyLogits	tanh	30	0.27162	0.09409
BPIC15	GRU	Manhattan	sigmoid	10	0.26281	0.06911
BPIC15	GRU	BinCrossEntropyLogits	sigmoid	10	0.25289	0.05625
BPIC15	LSTM	BinCrossEntropyLogits	sigmoid	10	0.24684	0.07262
BPIC15	LSTM	BinCrossEntropyLogits	sigmoid	5	0.24615	0.04891
BPIC15	LSTM	Manhattan	sigmoid	30	0.21862	0.0169
BPIC15	LSTM	BinCrossEntropyLogits	sigmoid	30	0.21804	0.01106
BPIC15	GRU	BinCrossEntropyLogits	sigmoid	30	0.21565	0.01526
BPIC15	GRU	Manhattan	sigmoid	30	0.21464	0.01558
BPIC15	LSTM	Manhattan	tanh	5	0.20308	0.03185

2 Table of results for BPIC20

Dataset	Model	Loss	Activation	Units	Mean	Sd
BPIC20	GRU	Binary-CrossEntropy	sigmoid	30	0.87323	0.05122
BPIC20	GRU	MSE	sigmoid	30	0.83938	0.08053
BPIC20	LSTM	MSE	tanh	30	0.8296	0.05432
BPIC20	GRU	MSE	tanh	30	0.81034	0.0615
BPIC20	LSTM	MSE	sigmoid	30	0.7983	0.09539
BPIC20	LSTM	MSE	sigmoid	10	0.74037	0.04591
BPIC20	GRU	MSE	sigmoid	10	0.72394	0.08635
BPIC20	GRU	BinCrossEntropyLogits	tanh	30	0.70921	0.09395
BPIC20	LSTM	MSE	sigmoid	5	0.70793	0.11518
BPIC20	LSTM	BinCrossEntropyLogits	tanh	30	0.70184	0.10671
BPIC20	GRU	BinCrossEntropyLogits	tanh	10	0.68187	0.10261
BPIC20	GRU	Binary-CrossEntropy	sigmoid	10	0.6721	0.08278
BPIC20	LSTM	MSE	tanh	10	0.65765	0.06305
BPIC20	GRU	Binary-CrossEntropy	sigmoid	5	0.65524	0.06094
BPIC20	GRU	MSE	sigmoid	5	0.64915	0.07283
BPIC20	LSTM	BinCrossEntropyLogits	tanh	5	0.61686	0.06016
BPIC20	GRU	Manhattan	tanh	30	0.61346	0.06756
BPIC20	LSTM	Manhattan	tanh	50	0.61119	0.02895
BPIC20	LSTM	Binary-CrossEntropy	tanh	30	0.60694	0.13303
BPIC20	GRU	MSE	tanh	5	0.60227	0.08323
BPIC20	LSTM	BinCrossEntropyLogits	tanh	10	0.59901	0.08822
BPIC20	GRU	Manhattan	tanh	50	0.59844	0.03633
BPIC20	GRU	Binary-CrossEntropy	tanh	30	0.59745	0.12107
BPIC20	LSTM	Manhattan	tanh	30	0.58938	0.03688
BPIC20	GRU	BinCrossEntropyLogits	tanh	5	0.58541	0.07497
BPIC20	LSTM	MSE	tanh	5	0.58428	0.04375
BPIC20	LSTM	Binary-CrossEntropy	sigmoid	10	0.58144	0.12384
BPIC20	GRU	MSE	tanh	10	0.57252	0.03288
BPIC20	GRU	Manhattan	tanh	10	0.57025	0.0239
BPIC20	LSTM	Binary-CrossEntropy	sigmoid	5	0.53555	0.09907
BPIC20	GRU	Binary-CrossEntropy	tanh	10	0.53484	0.07649
BPIC20	LSTM	Manhattan	tanh	10	0.51246	0.03145
BPIC20	LSTM	Binary-CrossEntropy	sigmoid	30	0.51119	0.08394
BPIC20	LSTM	Manhattan	sigmoid	5	0.51062	0.06373
BPIC20	GRU	Weight_Jaccard	sigmoid	30	0.50722	0.1202
BPIC20	LSTM	Binary-CrossEntropy	tanh	5	0.50708	0.05152
BPIC20	GRU	Weight_Jaccard	sigmoid	10	0.50623	0.07489
BPIC20	LSTM	BinCrossEntropyLogits	sigmoid	5	0.50538	0.06536
BPIC20	LSTM	Weight_Jaccard	sigmoid	30	0.50297	0.0947
BPIC20	GRU	Manhattan	sigmoid	5	0.49788	0.0566
BPIC20	GRU	BinCrossEntropyLogits	sigmoid	5	0.49405	0.02676
BPIC20	LSTM	Manhattan	tanh	5	0.49363	0.03527
BPIC20	LSTM	Manhattan	sigmoid	10	0.49263	0.03279
BPIC20	GRU	Manhattan	tanh	5	0.48924	0.03636
BPIC20	GRU	Manhattan	sigmoid	10	0.48669	0.03355
BPIC20	GRU	Weight_Jaccard	sigmoid	5	0.48258	0.12841
BPIC20	LSTM	Weight_Jaccard	tanh	5	0.48088	0.02516
BPIC20	LSTM	Binary-CrossEntropy	tanh	10	0.48031	0.04261
BPIC20	LSTM	Weight_Jaccard	tanh	30	0.47932	0.0127
BPIC20	LSTM	Weight_Jaccard	sigmoid	5	0.47833	0.07423

BPIC20	GRU	Binary-CrossEntropy	tanh	5	0.47776	0.04563
BPIC20	GRU	Weight_Jaccard	tanh	5	0.47734	0.02115
BPIC20	GRU	Weight_Jaccard	tanh	30	0.47734	0.02102
BPIC20	LSTM	Weight_Jaccard	sigmoid	10	0.4762	0.11041
BPIC20	GRU	BinCrossEntropyLogits	sigmoid	10	0.47365	0.01669
BPIC20	GRU	Weight_Jaccard	tanh	10	0.47153	0.02287
BPIC20	GRU	Manhattan	sigmoid	30	0.46997	0.02124
BPIC20	GRU	BinCrossEntropyLogits	sigmoid	30	0.46501	0.00728
BPIC20	LSTM	BinCrossEntropyLogits	sigmoid	10	0.46133	0.01754
BPIC20	LSTM	Weight_Jaccard	tanh	10	0.43669	0.03958
BPIC20	LSTM	Manhattan	sigmoid	30	0.2772	0.19316
BPIC20	LSTM	BinCrossEntropyLogits	sigmoid	30	0.27224	0.18167

3 Table of results for Hospital Billing

Dataset	Model	Loss	Activation	Units	Mean	Sd
HospitalBilling	GRU	binaryCrossEntropy	sigmoid	30	0.22299	0.01151
HospitalBilling	GRU	MSE_tanh	tanh	30	0.22011	0.02241
HospitalBilling	LSTM	MSE_tanh	tanh	30	0.21782	0.01866
HospitalBilling	GRU	MSE	sigmoid	30	0.20115	0.01762
HospitalBilling	GRU	MSE	sigmoid	10	0.17615	0.07169
HospitalBilling	LSTM	MSE	sigmoid	30	0.16149	0.0143
HospitalBilling	LSTM	MSE	sigmoid	10	0.15891	0.03626
HospitalBilling	LSTM	MSE	sigmoid	5	0.10374	0.06758
HospitalBilling	LSTM	binaryCrossEntropy	sigmoid	30	0.10029	0.06299
HospitalBilling	GRU	MSE	sigmoid	5	0.03908	0.03541