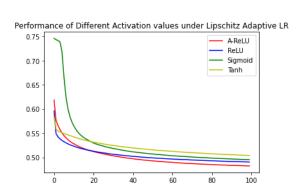
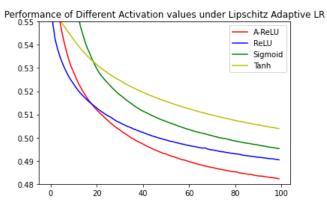
# **Parsimonious Computing**

#### Results:

### D-GEX(L) - Lipschitz Adaptive Learning Rate

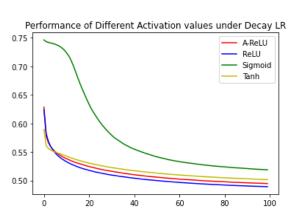
Number of Neurons	Number of Epochs	Sigmoid	Tanh	ReLU	A-ReLU
9000x2	100	0.4953	0.5039	0.4890	0.4822

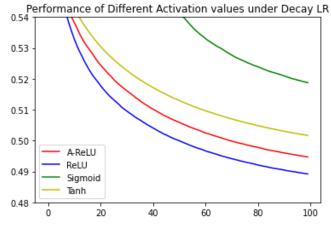




### D-GEX(D) - Exponentially Decay Learning Rate

Number of Neurons	Number of Epochs	Sigmoid	Tanh	ReLU	A-ReLU
9000x2	100	0.5188	0.5016	0.4892	0.4947

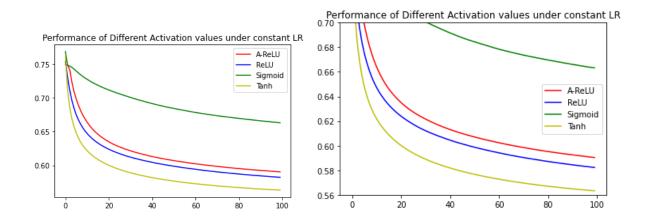




<sup>\*</sup>The Loss function used is MAE as taken in the Base Paper

## **D-GEX(F) - Fixed Learning Rate (7e-5)**

Number of Neurons	Number of Epochs	Sigmoid	Tanh	ReLU	A-ReLU
9000x2	100	0.6523	0.5633	0.5823	0.5898



Performance of LALR>Exponential Decay > Fixed LR

In LALR - AReLU performed better than the other activation functions.

 $<sup>{}^{\</sup>star}\mathsf{The}\;\mathsf{Loss}\;\mathsf{function}\;\mathsf{used}\;\mathsf{is}\;\mathsf{MAE}\;\mathsf{as}\;\mathsf{taken}\;\mathsf{in}\;\mathsf{the}\;\mathsf{Base}\;\mathsf{Paper}$