

Visualizing the models

We have built many models by tuning the hyperparameters and recorded the accuracy and loss function of the models.

Parameter metrics:

No.of units	Hidden layers	Activation Fun	Technique	Accuracy	loss
16	1	tanh		0.86	0.1
16	1	tanh	reg	0.86	0.16
16	1	tanh	reg & drop	0.87	0.14
64,32,16	3	tanh		0.85	0.15
64,32,16	3	tanh	Reg	0.86	0.11
64,32,16	3	tanh	reg & drop	0.85	0.12
64,32,16	3	relu	reg	0.88	0.15

From the above table the best model using tanh activation function is with three hidden layers (64,32,16 units) using regularization but when comparing this with relu function, the model that is build using relu activation has better performance metrics and model is stable.