

Update on Simple ResNet18 Functional Models

Gobind Puniani
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Method

- Simple ResNet 18 model only with ResNet module modified
- Functional model from two weeks ago
- 5 activation functions: ReLU, Swish, Mish, TAct, and mTAct
- 3 runs for each activation function
- 100 epochs per run

Results

Activation Function	Run 1	Run 2	Run 3	Median	Average
ReLU	0.723200	0.727700	0.683600	0.723200	0.711500
Swish	0.772200	0.749800	0.693400	0.749800	0.738467
Mish	0.725600	0.681700	0.727500	0.725600	0.711600
TAct	0.737900	0.743100	0.668400	0.737900	0.716467
mTAct	0.707200	0.752600	0.756900	0.752600	0.738900

Conclusion

- Unfortunately, TAct and mTAct did not perform as well as we hoped compared to the others
- Perhaps we need to modify the other modules in the model architecture