Digit Recog. CNN Report

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MY CNN architecture:-

```
42]  model.summary()
```

```
_____
Layer (type)                 Output Shape              Param #
=================================================================
conv2d_43 (Conv2D)           (None, 28, 28, 32)        832
_____
conv2d_44 (Conv2D)           (None, 26, 26, 64)        18496
_____
max_pooling2d_22 (MaxPooling (None, 13, 13, 64)        0
_____
dropout_38 (Dropout)         (None, 13, 13, 64)        0
_____
flatten_17 (Flatten)         (None, 10816)             0
_____
dense_33 (Dense)             (None, 512)               5538304
_____
dropout_39 (Dropout)         (None, 512)               0
_____
dense_34 (Dense)             (None, 46)                23598
=================================================================
Total params: 5,581,230
Trainable params: 5,581,230
Non-trainable params: 0
_____
```

BATCH SIZE -> 86
EPOCHS -> 15

WITHOUT DATA AUGMENTATION:-
Tanh -> 97.188%
Relu -> 98.565%
WITH DATA AUGMENTATION :-
Relu -> 99.232%