

Reshaping The Data

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As we are using Deep learning neural network, the input for this network to get trained on should be of higher dimensional. Our dataset is having three-dimensional images so we have to reshape them too higher dimensions

Reshaping Dataset

```
# Reshaping to format which CNN expects (batch, height, width, channels)  
X_train = X_train.reshape(60000, 28, 28, 1).astype('float32')  
X_test = X_test.reshape(10000, 28, 28, 1).astype('float32')
```

We are reshaping the dataset because we are building the model using CNN. As CNN needs four attributes batch, height, width, and channels we reshape the data.