TrainTheModel

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| **Date** | 24 November 2022 |
| **TeamId** | PNT2022TMID43214 |
| **ProjectName** | AI-poweredNutritionAnalyzerforFitnessEnthusiasts |
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Themodelistrainedfor20epochsandaftereveryepoch,thecurrentmodelstateissaved if the model has the least loss encountered till that time.

Wecanseethatthetraininglossdecreasesinalmosteveryepochtill20epochsandprobably there is further scope to improve the model.

**fit\_generator**functionsusedtotrainadeeplearningneuralnetwork

Arguments:

* **steps\_per\_epoch**: it specifies the total number of steps taken from thegeneratorassoonasoneepochisfinishedandthenextepochhasstarted.We can calculate the value of steps\_per\_epoch as the total number ofsamples in your dataset divided by the batch size.
* **Epochs**:anintegerandnumberofepochswewanttotrainourmodelfor.
* validation\_data can be either:
* an inputs and targets list
* a generator
* inputs, targets, and sample\_weights list which can be used toevaluatethe loss and metrics for any model after any epoch has ended.

It specifies the total number of steps taken from the generator before it is stoppedat every epoch and its value is calculated as the total number of validationdatapoints

in your dataset divided by the validation batch size.

