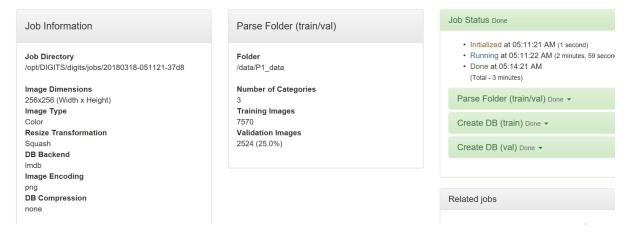
ROBOTIC INFERENCE – TRAINING SUPPLIED DATASET

This writeup aims to explain the methodology behind training the dataset (fondly termed as the foodDataset by the author).

The images are first organized by creating a dataset (the foodDataset). This will provide details as to what kind of images are provided (type, size) and how they should be normalized(squash/crop). The images that are used for training are to be labelled and organized into separate labels. In other words, these images serve as an example the network learns from.



After the dataset is created, it is then trained using one of the many options available. AlexNet was chosen due to its performance and processing power with color images. Then the model trained is validated against an unlabelled image.



The model was run with different epochs -8, which overfit, 3 which did not show optimized learning rate. But 5 seemed fine.

The Evaluate command was run on varying runs for the model with different epochs until the requisite threshold is met.

```
Average over 10 runs is 4.70528 ms.
Average over 10 runs is 4.69804 ms.
                                     ©POORNIMA L NATHAN
Average over 10 runs is 4.69836 ms.
Average over 10 runs is 4.65625 ms.
                                     DATE: 18/03/2018
Average over 10 runs is 4.23229 ms.
                                     TIME: 17:01:00 PM AEST
Calculating model accuacy...
           % Received % Xferd Average Speed
  % Total
                                                                  Time Current
                                                 Time
                                                         Time
Dload Upload Total Spent Left Speed 100 14765 100 12449 100 2316 1073 199 0:00:11 0:00:11 --:--: 2820
Your model accuacy is 75.4098360656 %
```

