Summary of Training Runs

The script's input parameters

```
Description: This configuration file is for the CFAR-10 data set. The CFAR32 data
    set consists of pictures of size 32x32. The model will have to accomodate these
    dimensions
dropout_percentage: 10
dropout_percentage_range:
- 10
evaluate_the_model: 0
fit_the_model: 1
machine_dump_file_name: example_1.keris.trained.machine.bin
machine_dump_file_name_base: kera.cifar-10.trained
mkernel_regularizer_l2: 0.1
mkernel_regularizer_l2_range:
- 0.1
number_of_epochs: 1
training_data:
    number_of_hidden_layers: 1
    number_of_hidden_neurons: 4
    number_of_input_neurons: 3
    number_of_outputs_neurons: 1
    number_of_training_iterations: 10000
    training_data_file_name: example_1.data.train.cvs
validation_data: example_1.data.validate.cvs
verbose: 1
```

The class / runs parameters

```
dropout_percentage: 0.1
mkernel_regularizer_l2: 0.1
number_of_epochs: 1
```

The model summary

```
Model: "sequential"
_________________________________________________________________
Layer (type)                 Output Shape              Param #
=================================================================
dense (Dense)                (None, 12)                48
_________________________________________________________________
dense_1 (Dense)              (None, 8)                 104
_________________________________________________________________
dense_2 (Dense)              (None, 1)                 9
=================================================================
Total params: 161
Trainable params: 161
Non-trainable params: 0
_________________________________________________________________
```

The model configuration

```
{
  "layers": [
    {
      "class_name": "InputLayer",
      "config": {
        "batch_input_shape": [
          null,
          3
        ],
        "dtype": "float32",
        "name": "dense_input",
        "ragged": false,
        "sparse": false
```

```
  }
},
{
  "class_name": "Dense",
  "config": {
    "activation": "relu",
    "activity_regularizer": null,
    "batch_input_shape": [
      null,
      3
    ],
    "bias_constraint": null,
    "bias_initializer": {
      "class_name": "Zeros",
      "config": {}
    },
    "bias_regularizer": null,
    "dtype": "float32",
    "kernel_constraint": null,
    "kernel_initializer": {
      "class_name": "GlorotUniform",
      "config": {
        "seed": null
      }
    },
    "kernel_regularizer": null,
    "name": "dense",
    "trainable": true,
    "units": 12,
    "use_bias": true
  }
},
{
  "class_name": "Dense",
  "config": {
    "activation": "relu",
    "activity_regularizer": null,
    "bias_constraint": null,
    "bias_initializer": {
      "class_name": "Zeros",
      "config": {}
    },
    "bias_regularizer": null,
    "dtype": "float32",
    "kernel_constraint": null,
    "kernel_initializer": {
      "class_name": "GlorotUniform",
      "config": {
        "seed": null
      }
    },
    "kernel_regularizer": null,
    "name": "dense_1",
    "trainable": true,
    "units": 8,
    "use_bias": true
  }
},
{
  "class_name": "Dense",
  "config": {
    "activation": "sigmoid",
    "activity_regularizer": null,
    "bias_constraint": null,
    "bias_initializer": {
      "class_name": "Zeros",
      "config": {}
    },
    "bias_regularizer": null,
    "dtype": "float32",
    "kernel_constraint": null,
    "kernel_initializer": {
```

```
          "class_name": "GlorotUniform",
          "config": {
            "seed": null
          }
        },
        "kernel_regularizer": null,
        "name": "dense_2",
        "trainable": true,
        "units": 1,
        "use_bias": true
      }
    }
  ],
  "name": "sequential"
}
```


The model layers and weights


```
[array([[-0.471183  ,  0.54156375,  0.4205683 ,  0.15397334,  0.35611963,
         0.4920199 ,  0.2656153 , -0.38662517,  0.6116141 ,  0.48599604,
        -0.13069677,  0.0544284 ],
       [ 0.20253828,  0.15518653, -0.2836626 , -0.2921327 ,  0.38102898,
         0.5433402 , -0.13474585, -0.1514003 ,  0.24399593, -0.14297415,
        -0.05142447, -0.19066095],
       [-0.49135724, -0.01697031, -0.60488796, -0.54907817, -0.0745245 ,
         0.6097493 , -0.06489876,  0.06784487,  0.5885602 , -0.5043822 ,
         0.13955222, -0.15777731]], dtype=float32), array([ 5.0607116e-05, -4.6171498e-04,  0.0000000e+0
       -2.7473309e-04,  1.2399205e-03,  5.3225760e-04,  0.0000000e+00,
        2.0910920e-04,  1.4481126e-06,  8.6559064e-04,  0.0000000e+00],
      dtype=float32), array([[ 0.00424274, -0.3772878 ,  0.17982161, -0.44198388,  0.5254403 ,
         0.38583308, -0.24218136, -0.38519943],
       [-0.41420057, -0.27260688,  0.17124939, -0.12595975,  0.29605255,
         0.41903055, -0.40698338, -0.25589013],
       [-0.40906584, -0.16006601, -0.5437819 ,  0.40542793,  0.41003358,
         0.0907982 , -0.13222939,  0.29076022],
       [ 0.36183202,  0.45113844,  0.19485521,  0.3565246 ,  0.4810331 ,
        -0.16258374,  0.3598205 , -0.49985817],
       [-0.31408498, -0.03730392,  0.2766406 , -0.11708596,  0.2389231 ,
        -0.31304651,  0.38613445, -0.03749746],
       [ 0.5034613 ,  0.40598816, -0.52790403, -0.13840446,  0.44920033,
        -0.06422786, -0.24903247, -0.0868848 ],
       [ 0.20051283,  0.10962814, -0.29544422,  0.54457426,  0.36488307,
         0.36567533, -0.41487825, -0.05119202],
       [-0.48232424, -0.35641462, -0.4089863 ,  0.26440835,  0.07071793,
        -0.26258925, -0.21256861, -0.10559532],
       [-0.01239349, -0.44456625, -0.28199974, -0.20837283,  0.26235816,
         0.04578055, -0.38764024,  0.17098635],
       [-0.17531382, -0.43247047, -0.5435511 , -0.02131599,  0.4487992 ,
        -0.48779976,  0.45220715,  0.43230486],
       [ 0.3811305 , -0.5053311 , -0.17809448, -0.4407792 ,  0.432537  ,
         0.3055642 ,  0.01862264, -0.377114  ],
       [-0.44594994, -0.24881804,  0.12940425,  0.2932139 ,  0.19019651,
        -0.19934979, -0.1307626 , -0.01794332]], dtype=float32), array([ 1.6532962e-03,  0.0000000e+00,
        8.9445896e-04, -9.9109588e-05,  0.0000000e+00,  0.0000000e+00],
      dtype=float32), array([[-0.7143143 ],
       [ 0.78685236],
       [-0.5744895 ],
       [-0.59716344],
       [-0.38675374],
       [ 0.05027756],
       [ 0.3702333 ],
       [ 0.54475474]], dtype=float32), array([-0.00231489], dtype=float32)]
```