Week of 27/09/20

-Installing TensorFlow/Keras for CPU and GPU using CONDA (July, 2020)

-Deep Learning with Python, TensorFlow, and Keras tutorial

-jeffheaton/t81\_558\_deep\_learning: Applications of Deep Neural Networks

-Basic classification: Classify images of clothing

Week of 04/10/20

-Deep Learning basics with Python, TensorFlow and Keras

Week of 11/10/20

-Installing OpenCV

-Deciding what Board to use if any

-ESP32

-Raspberry Pi

-UP Specifications – UP Bridge the Gap

Week of 18/10/20

-Issue with PC motherboard. Switching to Google colab and EireComm

Week of 25/10/20

-Setting up Google Colab and installing TensorFlow

-Creating Git Repository

Week of 01/11/20

* Mounting MY Drive so I can access files stored on google drive
* Resizing images
* Labelling the images (0, 1)

Week of 08/11/20

* Build and train first model

Week of 15/11/20

* Considering other options as to what I can try to classify using the model I build as there is a Kaggle comp. online which is very similar.

Week of 22/11/20

* Waiting for Pc parts to arrive
* W3 schools Python tutorial
  + Mean, Mode, Median
  + Standard deviation
  + Percentile
  + Data distribution
  + Scatter plot
  + Linear regression
  + Polynomial regression
  + Multiple regression
  + Scale
  + Train/Test
  + Decision tree

Week of 29/11/20

* Waiting for Pc parts to arrive / revision
* [TensorFlow tutorials](https://www.tensorflow.org/tutorials/images/classification)

Week of 6/12/20

* Waiting for Pc parts to arrive / revision
* <http://yann.lecun.com/exdb/mnist/>
* Experimenting with MNIST dataset classifying handwritten numbers.
* Studying optimizers - <https://keras.io/api/optimizers/>
* Studying Loses - <https://keras.io/api/losses/>

Week of 13/12/20

* Installing Pc parts / installing programmes
* Attempting to modify example code to identify handwritten numbers

Week of 20/12/20

* More testing of the model
* Using TensorBoard to visualize the data.

Week of 27/12/20

* More using TensorBoard to optimise and improve model.
* Making and normalizing my own version of the MNIST dataset

Week of 24/1/21

* Saving and exporting the model so it can be used to make predictions on unseen images
* Uploading and hosting the saved model on AWS.

Week of 31/1/21

* Using [expo](https://docs.expo.io/) to display project app on web browser / mobile.
* Setting up TensorFlow on PC to switch from using Google colabs.
* Looking for datasets.

Week of 7/02/21

* Using Tensorflow with Jupyter Notebooks to classify road signs / pedestrain in roadways.
* Looking at how to classify video.

Week of 14/02/21

* Trying to get Classifier model working on a react web app

Week of 21/02/21

* Using a batch file to mass convert images found online from .pgm to .png so they can be added to the existing DATASET.

Week of 28/02/21

* Study Week

Week of 07/03/21

* Trying to get Classifier model working on a react web app

Week of 14/03/21

* Looking at ways to classify multiple objects per image

Week of 21/03/21

* classifying multiple objects
* Problem solving

Week of 28/03/21

* Looking at TF Record files

Week of 04/04/21

* Looking at YOLOv3 Object detection api.

Week of 11/04/21

* Project report (Draft)

Week of 18/04/21

* Looking at YOLOv3 Object detection api.

Week of 15/04/21

* Study Break

Week of 02/05/21

* Project report

Week of 09/05/21

* Project video + poster