**Model Architecture design**

**Loss function**

* Focal loss

**Pre-processing**

* Crop image to standardized form
* Normalize images
* Augment: Flip images on horizontal axis
* Leave 2 users out.
  + Implement randomly leaving 2 users (10 videos) out for train-validation split
  + Also create a sudo test set of 1 user (5 videos)
  + This leaves 25 train, 10 validations, 5 test videos
  + Write a script which we can run to split of the fully compiled train csv prior to running the code.
  + This is a load data function

**Post processing:**

* Thresholding of the softmax outputs.
* The minimum threshold is 1/10 = 0.1?
* What is the optimal threshold for this challenge?

**Hyperparameters**

Tips for devising a model without actually testing it

LR – if too high loss with drop fast but validation will bounce around

* If neither are moving it is too low
* If both asymptotic then probability decent
* Learning rate (Research good options)
* Batch size (=8)