Neuron Finder

Team Elders: Ankit, Nihal and Maulik.

NMF

- Same old Thunder API, but with Spark
- Ticking parameters to update the results
- **Wrong direction :** Searching for parallelizable API
- Problems on GCC VM:
    - **Allow network traffic checkbox** to download data
    - Some problems with **access and filenames**

U-Net

- Added all images of a sample to create one single image i.e. training image.
- Created a labels image by masking the coordinates of json file for a sample.
- Fed the training image and labels image to UNet model to train the model.
- Problem: Model was able to predict but could not finish up the code to convert single predicted image into ROIs.

Σ(Images) + FasterRCN

- Added all images in the particular dataset
- Normalized it so that the weights don't blow up
- The labels where then Processed to get bounding boxes for each dataset
- An Faster - RCN was trained using this data
- When the images were summed some neurons especially dark ones were ignored

Engineering and Team-Work

- Agile Methodology
- Used Kanban Board for progress monitoring
- Tried to achieve 100% parallelized workflow
- Managed to achieve a very good parallelization
- BackFired when all started little late , Coding Rules

Thank You.

Questions….??