

## Weekly Schedule Schedule:

**Sunday, 5:00 PM @ CSE Basement + Wednesday 7:00 PM @ CSE Basement**

Our github repo: [alckasoc/sp22-team-1 \(github.com\)](https://github.com/alckasoc/sp22-team-1)

**5/8/2022 Meeting Time: Sunday 5:00 PM @ Zoom this week**

**Weekly Meeting Time: Wednesday 7:00 PM**

**Attendees:** Aarohi, Vincent, Yosen, Haaris

## Summary of Meeting

- **Quizzed each other on CNN**

1. What is a Deep Neural Network?
2. What is a Convolutional Neural Network?
3. What makes a CNN better than a DNN for processing images?
4. What is a convolution?
5. Why are these convolutions better than simple Linear layers?
6. Why do we have a Linear layer at the end of a CNN?
7. What is max/average pooling and why do we use it?
8. What do the hyperparameters mean for Conv2D and also the pooling?

- Solved output dimension using  $(N+2P-F)/S$
- [https://colab.research.google.com/drive/1jTfNN0aq4SSuRP0TZ4vVLGxprzCjZ\\_z0?usp=sharing](https://colab.research.google.com/drive/1jTfNN0aq4SSuRP0TZ4vVLGxprzCjZ_z0?usp=sharing) (Conv2D equation to identify shape of output)
- Brief introduction to R-CNNs
  - We will be using Faster R-CNNs

## Notes

- What each person has accomplished so far:
  - Yosen: became more familiarized with how filters work in CNN, feed forward, and backprop
  - Aarohi: solid theoretical foundation, shaky with coding
  - Haaris: not much progress, getting ready to start R-CNNs

## Action Plan:

- **By wednesday**, grapple with Faster R-CNNs (resources provided in the repo, but feel free to also explore it on your own). I want you guys to have a training notebook for a basic CNN on a dataset of your choice (for classification) by wednesday.
- **On Wednesday**, we code it together! This will also require some more understanding about how object detection (before we did classification, now we are doing object detection) is done with neural networks (resources provided again).