Week 9 - Check-in

Abhik Biswas

November 18, 2024

1 Questions

1. How was the mentor meeting? Was there a good discussion/Did you get your questions answered/requests responded to?

   Answer: The mentor meeting was great! This week's meeting was joined by Dr. Kessler, and he gave us valuable insights as to why the model may be failing to perform in the limited number of misclassifications that we have been observing. ViTs being the superior of the bunch, we were not trying out that much augmentations while training the ViT, which Dr. Kessler suggested we do, in order for us to obtain an apples-to-apples comparison.

2. What has been the group's overall status and contributions this week?

   Answer: We received instructions on what to work on next - we are now exploring hyperparameter-tuning for data augmentation and normalization techniques, that would help make the newer images similar to the older images, or vice versa. Tests are also being carried out by mixing data from multiple sources, and keeping a track of the proportion of images that are coming from the multiple sources. We also received some still images (not as a part of videos, but standalone), and would be testing out our model capabilities on them as well.

3. What has been your individual contributions to the project this week?

   Answer:

   - Abhik Biswas: Continued exploration of Low-Rank Adapters, along with applying cropping on images to be fed into the ViT pipeline
   - Isaac Tucker Peabody: Explored multiple cropping methodologies, on the ResNet-18 pipeline
   - Harinder Mashiana, Mohini Bhave, Shrinjay Kaushik: Explored explainability techniques - Grad-CAMs and Saliency diagrams to explain the outputs.

4. Any challenges or roadblocks?

   Answer: No blockers for this week.

5. Any questions or feedback?

   Answer: No questions. A productive concise discussion took place.