Pre-Meeting - Thursday, July 25th at 5PM

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1 Goals and Overview

- Quick admin updates; reflection on things going wrong.
- Discussion potential ways to extend CNAPs, opportunities, flaws, etc.
- Discussion on hierarchical MAML, should we pursue, combine or discard?
- If time, possible discussion of Semi-Supervised VAEs and introducing boundary losses.

2 Admin (ETC: less than 5 minutes):

- Applied to Amazon Go Fellowship; (will submit applications to NSERC, Borealis AI Fellowship and Vector Fellowship, but these would be mainly for 2nd year MSc).
- Should I take a PL course (namely CPSC 509)? Given that I want to finish up courses ASAP, to have more time on research (and potentially Inverted AI) especially later in my MSc as I'm better trained and more experienced, there are possible ways to mix up courses to gain credits for the work I'll be doing anyways (e.g. directed studies, applied entrepreneurship courses). Natural downside is limited learning compared to say taking Trevor Campbell's course next year. What are your thoughts?
- Adam will be joining at 6 for a chat on Inverted AI.

3 Research (ETC: Remaining Time):

- In a desperate attempt to restructure my visual sentiment analysis paper, I spent almost all my sleepless time since our last meeting on running more experiments, re-writing the paper and the discovery of a recent paper out of Berkeley added to generating new baselines while I was also performing an ablation study of my approach. That was until around 7pm yesterday.
- My initial work on this project was as a team project in 532S where (small but as it turns out crucial) parts of the code were completed by my teammate. That included the accuracy function used evaluate the Encoder-Decoder approach to classification. This #### ## #### ######## being my teammate somehow managed to screw up something as easy as enforcing a proper both Noun and Adjective correct classification metric. Therefore, the surprisingly nice results we were seeing through the sequential approach were superficial... and long story short, my portfolio will not have a visual sentiment paper.

- Idea regarding use of cross-modal hierchies in CNAPs: on the classification layer, they're using the adaptation function to set weights which is fairly implicit. But say they were to initialize weight and do gradient descent, now using initial classification weights from the classes closer to the class in focus would improve performance. I wonder if we can introduce the hierarchy as a prior to classifier weight adopter.
- I'm currently doing a run of reading more on Semi-Supervised VAEs. Particularly focusing on Auxiliary VAEs but also the other ones referenced here.