

**o How difficult was this lab? How interesting was this lab?**

Personally, I thought this lab was really challenging (probably one of the hardest we've done all year), but the reward was definitely worth it. Seeing the actual text generation at the end was amazing, and I got really excited to think about the possibility of applying the algorithm to any dataset imaginable. However, I did spend over 12 hours working on both parts (I ended up doing it one day making it even more exhausting).

**o Does 2 RED credits for writing all this seem about right?**

For the level of challenge, yes. I'm not sure if the lab really requires two separate assignments, since Gen AI 2 was significantly easier than Gen AI 1, but the full lab itself deserves 2 Red credits. The idea of implementing a DNN *within* the RNN code took a while for me to wrap my head around, as well as understand a little bit of the underlying math behind CCE and softmax. Additionally because it takes such a long time to train, debugging becomes a pain, and it requires an immense level of patience. If a student is able to get through all of this, I think 2 Red credits seem deserved.

**o Should I keep this unit in future versions of this course?**

Yes, 100%. While the Gen AI Lab was certainly a challenge and made me question my sanity (as all AI labs do), it felt like a testament to my programming abilities. It was able to smoothly unify everything we had done in the previous unit and the RNN labs of this unit. Without the Gen AI Lab, these two units felt tedious and over-complicated, but seeing everything come together made it worth it. I do think that the first two RNN labs should be explained in more detail, such as having another lecture or two to help wrap our heads around this new idea of having both layers and steps. I'm not sure if RNN 3 should be included in this unit though because it felt repetitive from RNN 2, yet really challenging to debug (I spent an unnecessary 7-8 hours just trying to fix silly errors in my RNN 3). In my personal opinion, we should introduce this unit after AP season and have it be the last unit of the year, since the Gen AI lab was *epic*.