Project 5 - Passion Project Flora Xinru Cheng December 10, 2019

For this project, I wanted to stay in the domain for my project 4, but adding an image component using CNN. I got a bit overly ambitious in the planning stage, and had some major issues connecting the NLP portion of the code with the CNN one. More thorough data exploration could have prevented that, but I decided to dive into testing CNN and making an MVP instead.

There is still a lot more that I would like to do for this project, which partially confirms this is indeed a topic I am passionate about. Here's the summary so far, as I continue working on the Flask app, debugging my code, and polishing and practicing my presentation. I'll probably adapt some of this summary for a blog post this weekend.

## → Keeping a log of tasks and issues is helpful

Because I knew this would be the most challenging project to-date, and I have too many ideas during the proposal, I kept a daily log of short- and long-term goals, points of confusion, as well as suggestions from my Metis instructors and peers, as my project evolved. The document is now at 25 pages (!). It helped the most the day before and after each daily log was written, but also during weekends and Thanksgiving break to keep track of tasks and remind myself of the big picture. I don't have time to actually read through and summarize it now, but just glancing over it reminded me of the various issues I solved along the way, and helped me feel a bit more accomplished (even though I'm not satisfied with the results I have at this moment).

## → Fail fast

This concept, which was new to me before Metis, became the most obvious during this project. It's a bit frustrating how frequently I had to abandon ideas or discard progress in a different direction in order to "keep moving". But on the other hand, I also liked getting results (even bad ones) quickly and adjust the plan of action accordingly (as opposed to in my previous field where the timeline of experiments is measured in months or even years).

## → Adjusting expectations

This came up a lot both at the start and the end of the project. During the design phase I got too excited about working with images using CNN for the first time, and even spent a day diving into research in the field, reading through papers, etc. I also still find myself having to adjust from the Academia mindset of always trying to do something new that hasn't been done before. It's good to be reminded that this is a 3-4 week project and we don't have the time, expertise, or resources of the experts doing research for Google. And right now, days before presenting the project, I also find it really helpful to step back and get some perspective. Even though there are aspects of the problem I worked on and cannot show during the 4-minute talk, the time spent on learning or improving the skills related to them is not wasted. I still can't fully appreciate it right

now (still bothered by the Flask app not working how I want it to), but it's quite amazing how much I've learned, and the broad set of tools and concepts we touched on.