
"Any fool can know. The point is to understand."
- Albert Einstein

Entering university, I truly expected that I would learn theory and methodology that is important to me and my future. As such, my goal was more than that of a diploma, I wished to grasp and retain concepts that I would carry on with me. To do this, I realized that it would not suffice to simply know the material. Rather, I strove to truly understand the concepts I was shown and the reasoning behind them. The understanding, in turn, came mostly from committing more time into each homework assignment or project than was strictly necessary. I've always indulged in heavy procrastination, which at first hampered my ability to experiment with the material. However, I learned that taking the time to understand a concept as you're working on it is well worth the time sunk on it. As such, I've learned to give myself the time to take time.

In this digital age, we are bombarded by distractions, and can often find excuses to finish some work and never think about it again. I know that I am not guiltless on this myself. In addition, the massively accessible Internet makes it possible to find answers to almost every question we could ask. While this gives us access to the great expanse of human knowledge, it can also tempt us to simply reuse that knowledge, rather than understanding the concept. To avoid this, I've grown to making sure to leave time for myself not to just complete the work, but also tinker with it. For example, in my Algorithms class, while the programming assignments were usually small and not the main focus, there was much room for tinkering if one strove to be first on the performance scoreboard, which I always did. While it usually did not contribute to one's score, it did help me understand a particular algorithm better, which helped me score better on the test as well as retain that knowledge for the future.

I learned that rather than rushing through a project, it's much more effective to take the time to tinker with the work. In my Machine Learning class, my professor used Jupyter notebooks to explore and present the material. So, in my Computer Vision class, I used Jupyter to explore on my own, seeing what kind of combinational gradients work best for making a panoramic, and try out image transformations that go beyond the assignment. In my Machine Learning class, I procrastinated my work to the due date and completed it with a fire-and-forget mentality, and as such I would have to review the notes in order to remember the concepts. The tinkering I did in my Computer Vision class, however, helped me become a more thoughtful and investigative learner, and I still retain the relevant concepts.

In any line of study or work, just knowing the material is not enough. It would not do to regurgitate equations that can easily be found online, when one does not know how or when to use them in a particular problem at school or at work. A good understanding is gained by

tinkering, experimentation, and self-development, and I'm glad to have furthered these skills through my time at UB.