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Compared to previous courses the learning portfolio in Math 441 was unique. I really enjoyed how the portfolio gave us the freedom to explore topics related to the class in place of assigned homework as it gave immediate value to the topics covered in class by seeing their applications.

When coming up with topics for my learning portfolio I usually noted down questions that I had from class. This approach allows me to focus on areas of study that are relevant and interesting to me, while also identifying any gaps in my understanding that I may need to address. In the cases where I was stuck, I would listen to the suggestions of my professor. Additionally, these methods allowed me to stay engaged and motivated as I worked through my portfolio, as I am able to see the direct connection between my studies and my own personal interests.

I am definitely most proud of the 3-partition problem artifact because it required me to draw upon a variety of skills and concepts that I had learned in the class and explored in other artifacts. Working on this challenge was satisfying because it gave me a clear focus to apply the knowledge and problem-solving abilities I gained from this class meaningful way. This is again in contrast to other classes where I may have to wait a long time to directly employ the topics learned. It was also rewarding to be able to solve the problem on my own, as it gave me a sense of accomplishment and confidence that I can use what I learned in class in a meaningful way.

I found compressed sensing to be the most difficult topic to learn about. This was due to the mathematical concepts and techniques involved, which required a strong foundation in linear algebra and signal processing. In addition, the abstract nature of the topic made it challenging to understand. Despite these difficulties, I was determined to learn about compressed sensing so I spent extra time searching through a large variety of online resources and tutorials. While it was a challenging process, I am grateful for the opportunity to learn about this fascinating and important area of research.

For future students, I would heavily advise starting the portfolio to plan out the goals and topics of the portfolio early. Having clear goals will help you focus your efforts and make the portfolio more meaningful. Furthermore, having a clear idea of what to do will allow them to avoid the pitfalls I had of scraping artifacts due to not liking the work done, or thinking that the idea wasn't right for the class.