Dear Mr. Tenebaum:

Our group would like to collectively thank you for providing us with this opportunity and overseeing the undertaking of this project. The project cycle was novel and challenging, but also rewarding and educational. As this term comes to an end, we would like to take this opportunity to assess the challenges and successes and elaborate on our plans going forwards. While we would have enjoyed the opportunity to spend more time exploring and fleshing out the project, circumstances beyond our control ultimately kept us from fulfilling all of our established goals. Despite not meeting all the initial goals of the project, we feel that we have put future users and teams on a good footing.

Broadly speaking, the project consisted of research, information organization, and implementation sections. We spent the better part of a term doing preliminary research and designing our approach to creating the database. Afterwards, we devoted our effort to testing out various applications to see their performance. The research sections are largely complete, abut implementation still requires a further work. These changes are further detailed in the next-steps package, but some overall tasks included a top-level description and integration of ffmpeg into existing ROS systems, integration of PyTorch with cvbridge, and further tests on GPGPU programming. There is still work to be done in terms of fleshing out the conclusion of the project. Unfortunately, time constraints and physical restrictions to movement and access to school facilities prevented us from testing ffmpeg, which I understand was one of the important motivations for this project. Nevertheless, I am confident that the existing documentation will ready future users to implement ffmpeg in the future. Some members of the group will continue research into these areas and will bring the artifacts to a more complete and modular stage.

Looking forward, there are many promising changes to make in the future of the project. We hope that the resource and website we leave behind help alleviate future users in their use of the Jetson Nano. Furthermore, our research has indicated that setting up the required software is straightforward, and we anticipate next year's students will have a simpler, more straightforward time in implementing the GPU-accelerated software in their future project, whether it is for personal projects or OSURC tasks.

In reflection, this project tested our ability to search, understand, and synthesize information. Our experiences and your guidance brought us into greater contact and understanding with the powers and applications of GPUs, particularly within an integrated engineering system. While more work remains to be done, we believe that given the circumstances, we have done well. Once again, we want to thank you for your advice, support, and involvement throughout this process.


Best wishes,
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