

Journal #1

Throughout the past two weeks, my primary focus has been on finalizing my computer systems research project. I submitted a project proposal this past Tuesday (09/03/19) which described my idea of utilizing Machine Learning to predict vehicle crashes in dash camera footage through video extrapolation. In essence, given a shortened dash camera video that only shows footage until a few seconds before the crash, I want to be able to predict the video frames of those few seconds leading up to the crash itself. This will allow me to make an accurate and more concrete prediction of whether a crash occurred. In addition to this idea, I also proposed a variety of other projects relating to image analysis. These ideas include converting daytime images to nighttime, creating an image from a caption, increasing the frame rate of videos through frame interpolation, and increasing the resolution of images through pixel interpolation. Out of these ideas, the two that you advised were most viable were predicting vehicle crashes and caption to image, however, you mentioned that the latter needs to be applied to a specific field or subject to be feasible. Most of my class time was spent thinking of ideas, reading research papers, and discussing possible projects with you. Overall, I believe that the past two weeks were productive, and I hope that in the coming weeks I will have a finalized idea to pursue.