TA comments on project reports:

- In a lot of reports the results were not presented in a clear manner. I had to dig into the report (and sometimes guess) to find the recommended values for the design variables.

- In a lot of reports the results didn't have units, or the units were wrong.

- I saw reports where alpha had a value larger than 1.

- Based on my subjective experience, if I look at the definition for a derivative \( \Delta t \) should tend to zero. Therefore, a large value of \( n \) does not have significance. A large \( n \) (\( n > 5 \)) will still give a numerical result, but it will lose its physical meaning as derivative; it will become more like an average value. It's true that a large "\( n \)" would filter (smooth) the signal even further, but that is the job of the moving average. My opinion is that if a smoother signal is desired, then the value of alpha should be decreased even more while maintaining "\( n \)" no larger than 5.

In other words, the way I see it, the jerk is the rate of change of the acceleration and if we select a large "\( n \)" it won't capture how the acceleration is changing.