

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 Δt 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.