MAEG 5720 Computer Vision in Practice

Project 1

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The template tracking algorithm works in this way: First, it will take the first frame and operate NCC algorithm on it. Then we get the first window of the car position. Second, use the first window as the initial window for KLT and track the rest of frames all with KLT.

When sigma changes from 1 to 10, images will become blurrier and smoother. Below is the figure showing the relationship between sigma value and iteration number of each frame. From the figure we can readily find that when sigma become bigger, the iteration number for KLT decreases. Therefore, we should choose bigger sigma for fast tracking.