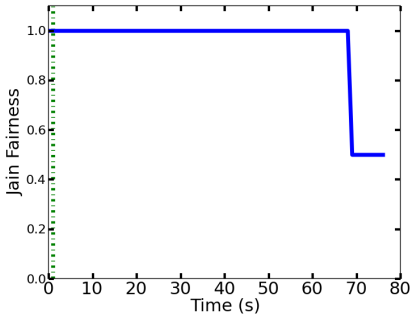
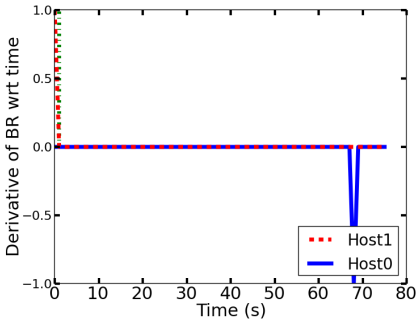
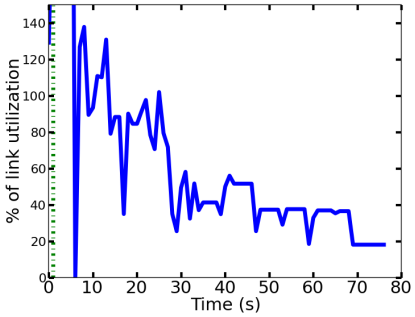
Project 1

Guanqun Wang (gw2353)

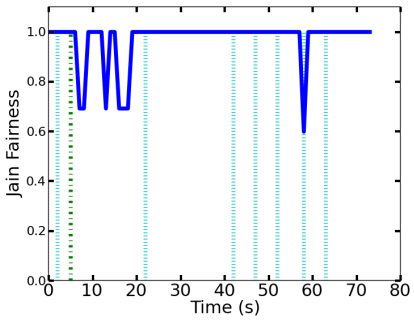
Alpha = 0.1:

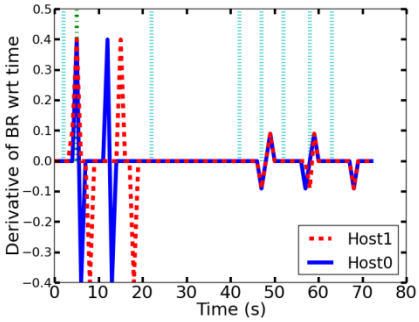


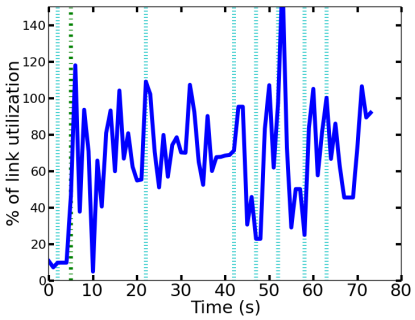




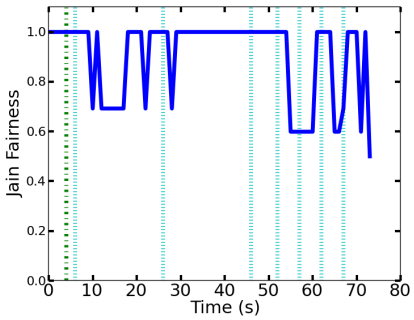
Alpha = 0.5:

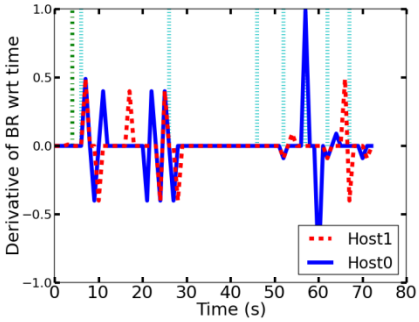


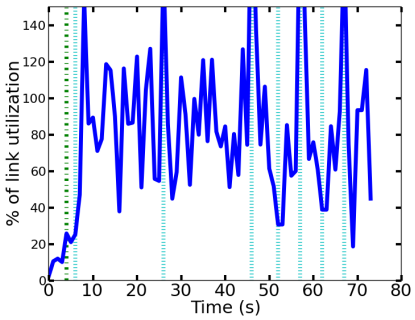




Alpha = 0.9:







Fairness:
As we can see, if alpha increases from 0.1 to 0.9, the fairness becomes more intense. So when alpha is close to 0, the proxy will distribute the same resources to these two clients.

Smoothness:
The lower the alpha is, the smoother the bitrate is. Because the lower the alpha is, the more weight T_current has, so the curve is smoother.

Utilization:
The utilization is not obvious to observe.

Above all, if we want a fair, smoother distribution of the network resource, we should choose a lower alpha; if we want a unfair, less smoother distribution of the network resource, we should choose a higher alpha.