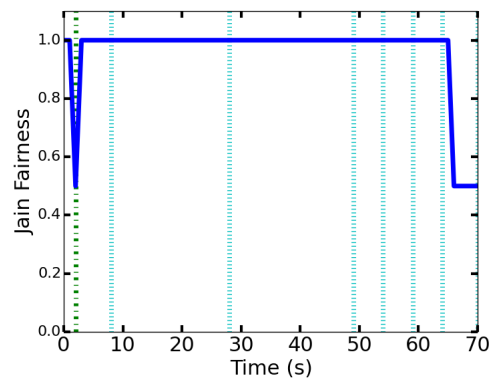


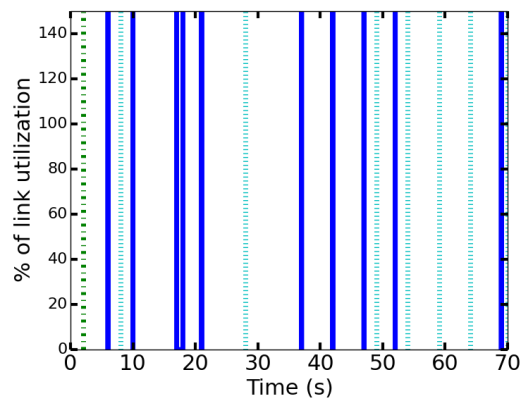
CHECKPOINT 1 WRITEUP:

GRAPHS FOR ALPHA=0.1:

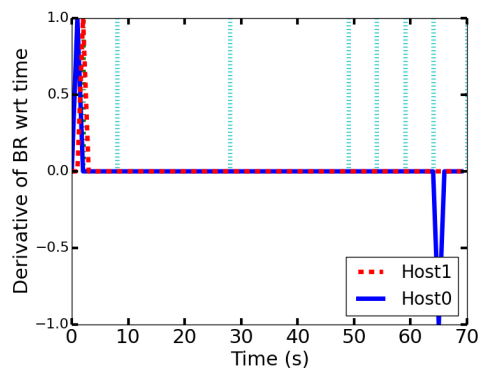
Fairness:



Utilization:

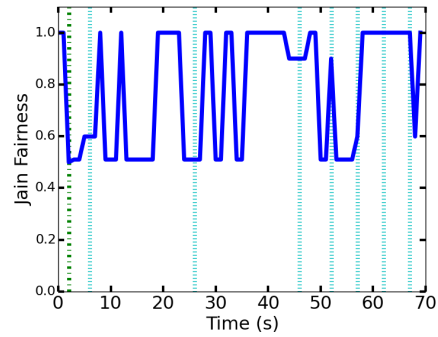


Smoothness:

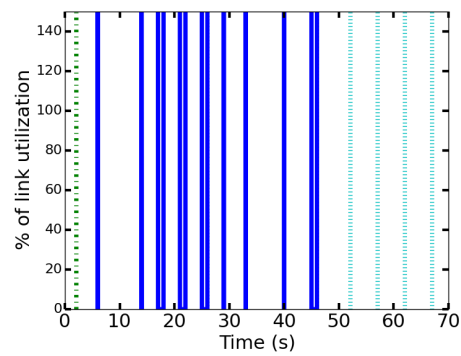


GRAPHS FOR ALPHA=0.5:

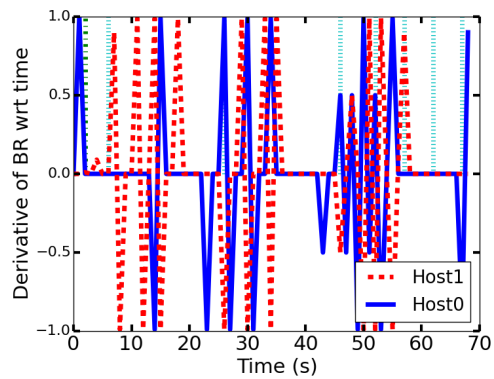
Fairness:



Utilization:

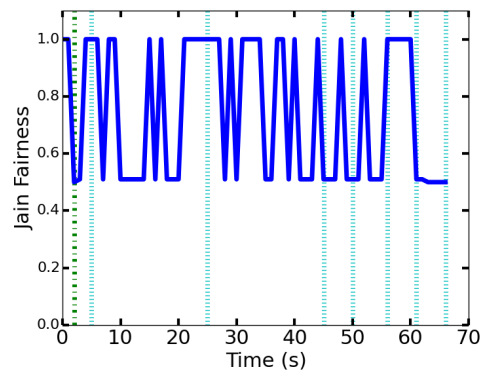


Smoothness:

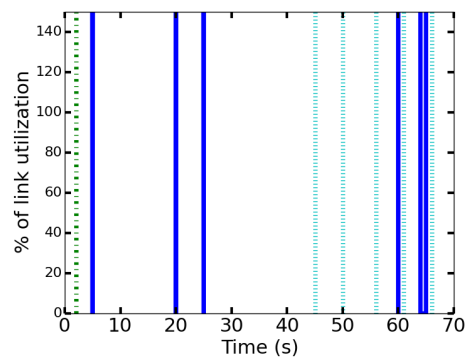


GRAPHS FOR ALPHA=0.9:

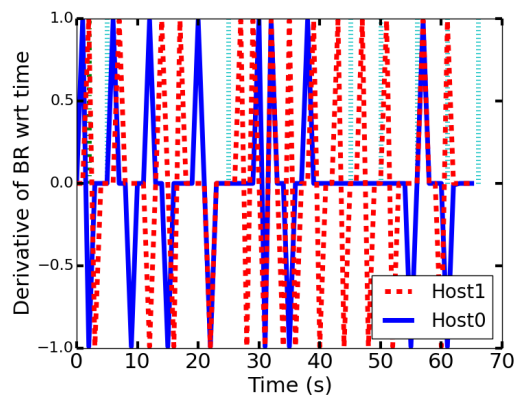
Fairness:



Utilization:



Smoothness:



DISCUSSION:

At alpha of 0.1, the video plays smoothly but the average throughput/bitrate does not react quickly to changes i.e. It is less sensitive. At alpha of 0.5, there is an equal tradeoff between sensitivity to change and smoothness of video. At alpha of 0.9, the video is very rough, but the bitrate/throughput changes are extremely sensitive to change.

We notice that the fairness for both hosts converge as alpha increases. Whereas, with alpha close to 0 we see that one host has a constant fairness of 1, while the other has a poor fairness index.

We also observe that our link utilization oscillates between very high utilization and very low utilization and is not within expected bounds. The expected behavior is for link utilization to oscillate more as the alpha value increases due to the average throughput's increase in sensitivity to change. However, the distribution of link utilization in our plots does not correlate to alpha value, likely due to our implementation.

Finally, we see that the smoothness decreases with increase in the value of alpha. This behavior is expected.