

# Computer Network Lab 3 Report

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## 1 Experiments

We experimented the proxy on the dumbbell topology with  $\alpha = 0.1$   $0.5$  and  $0.9$ . Here is the experiment data we get.

## 2 Analysis

It can be seen from the plot that lower  $\alpha$  can achieve higher smoothness. While higher  $\alpha$  can achieve better fairness. The utilization varies a lot and obvious patterns can't be found.

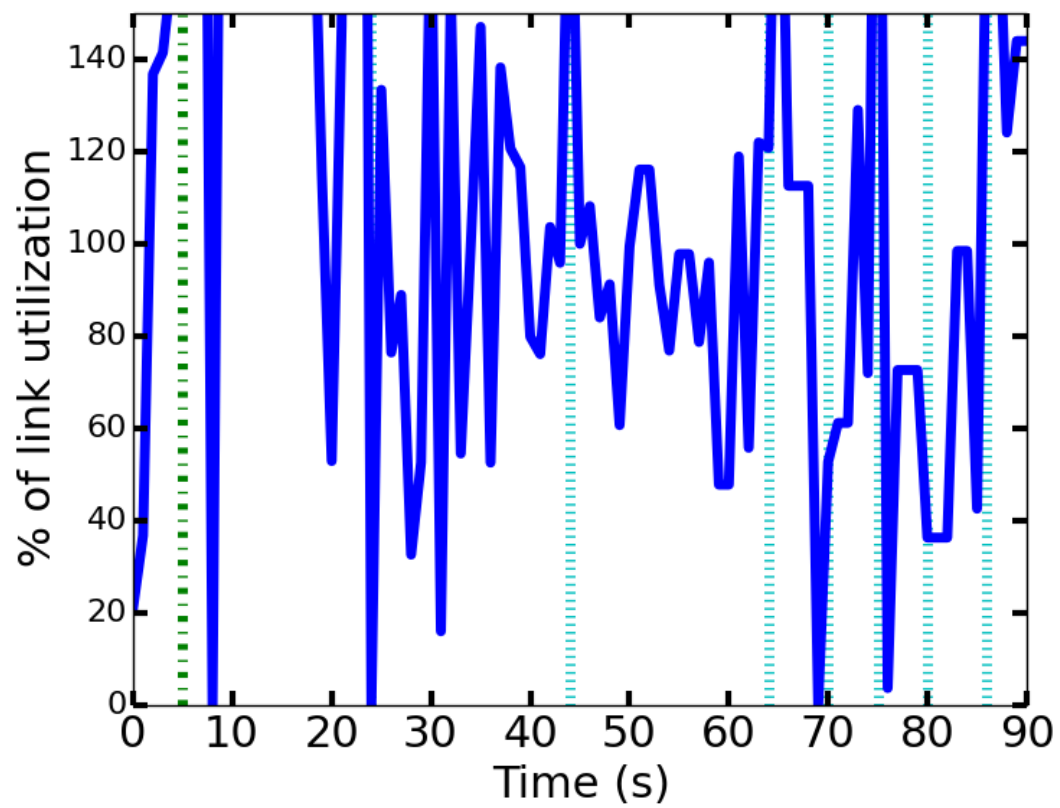


Figure 1: Utilization for  $\alpha = 0.1$

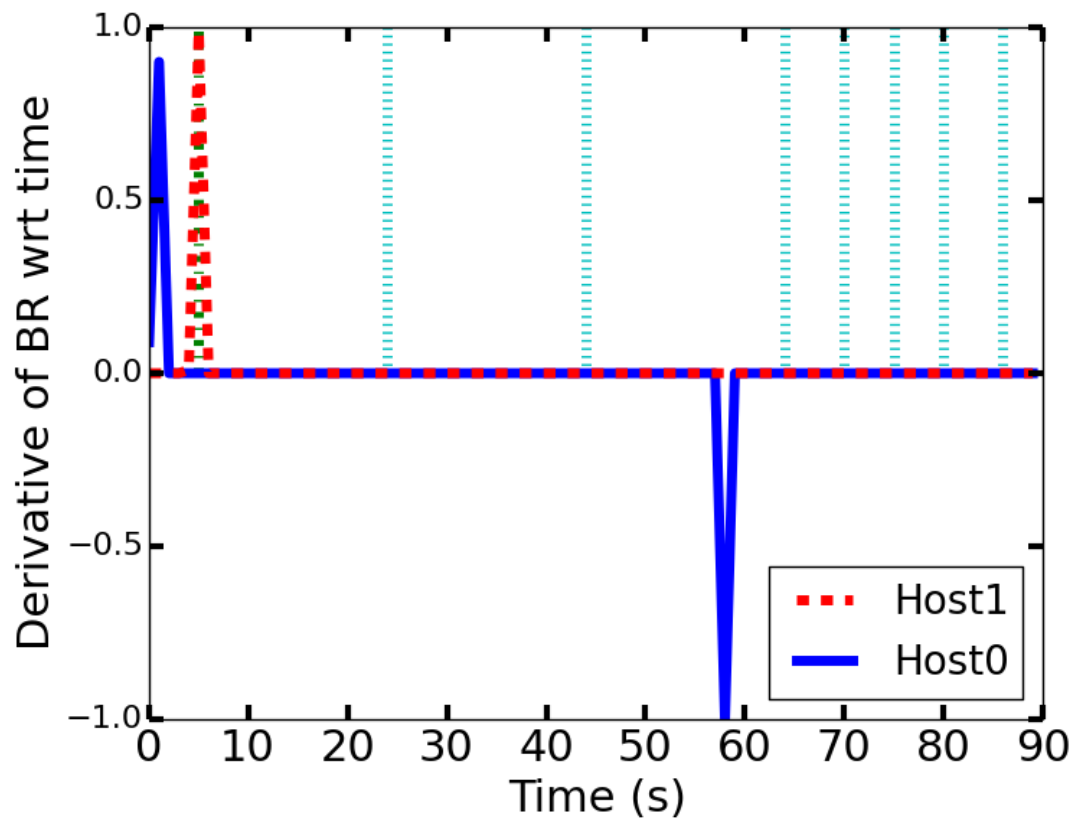


Figure 2: Smoothness for  $\alpha = 0.1$

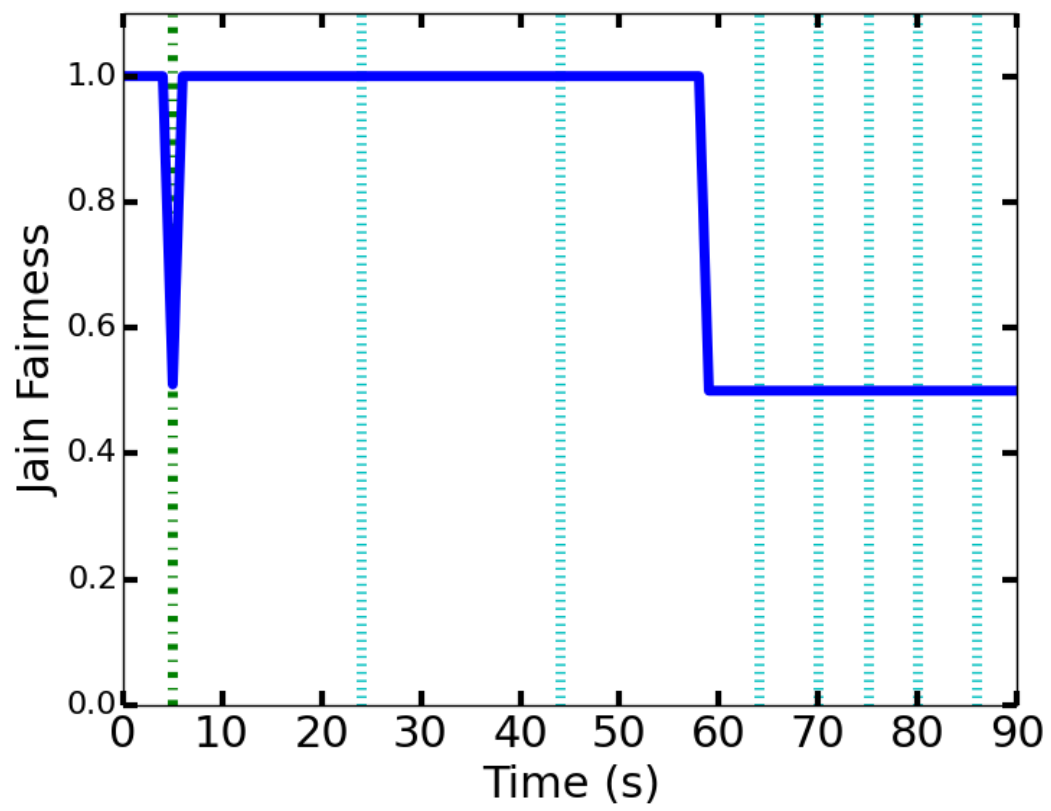


Figure 3: Fairness for  $\alpha = 0.1$

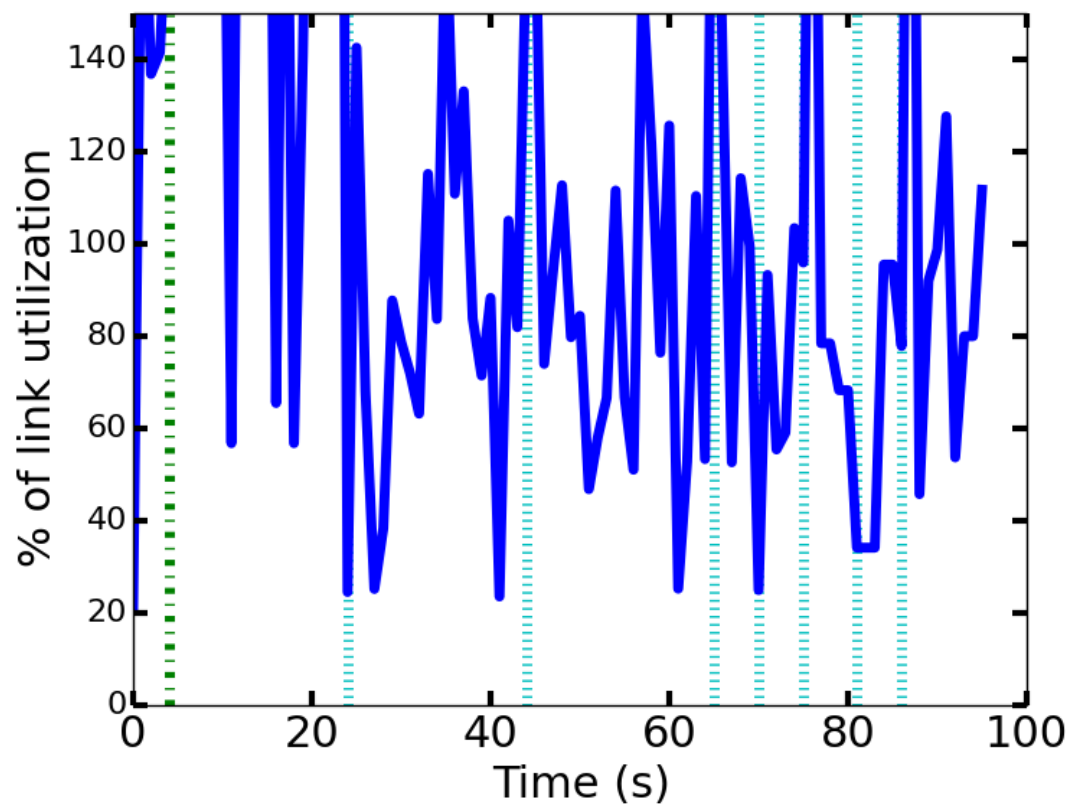


Figure 4: Utilization for  $\alpha = 0.5$

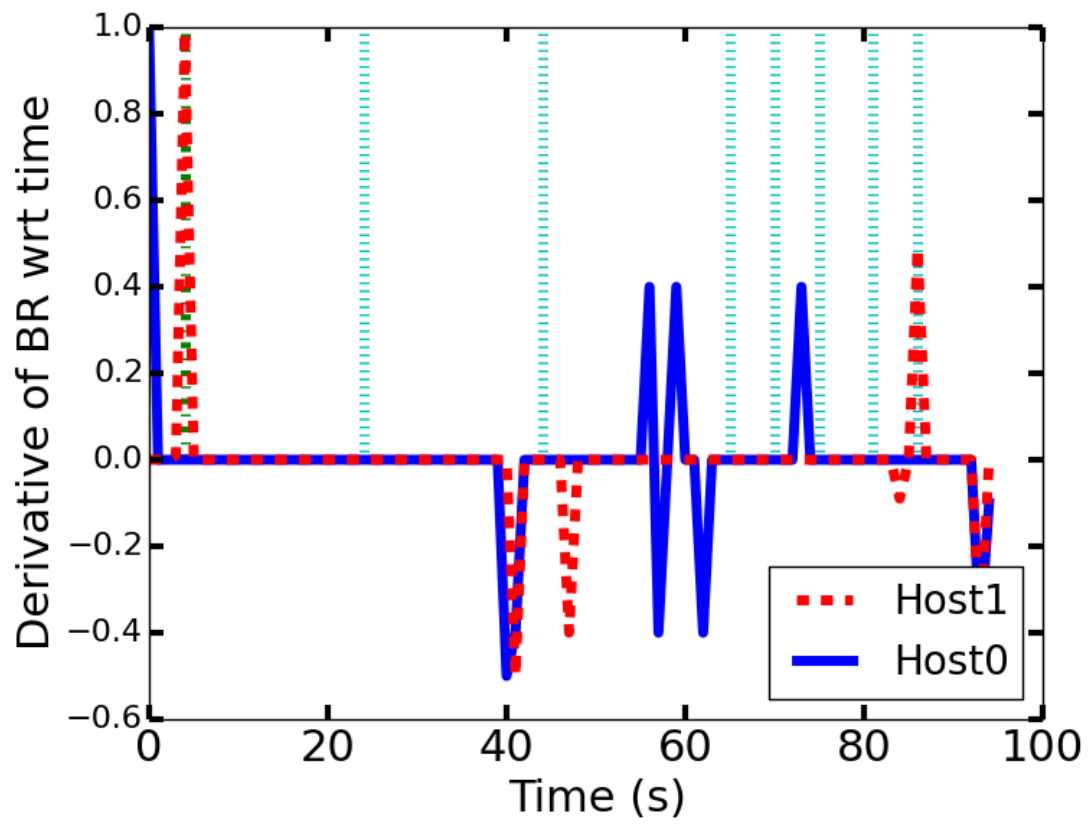


Figure 5: Smoothness for  $\alpha = 0.5$

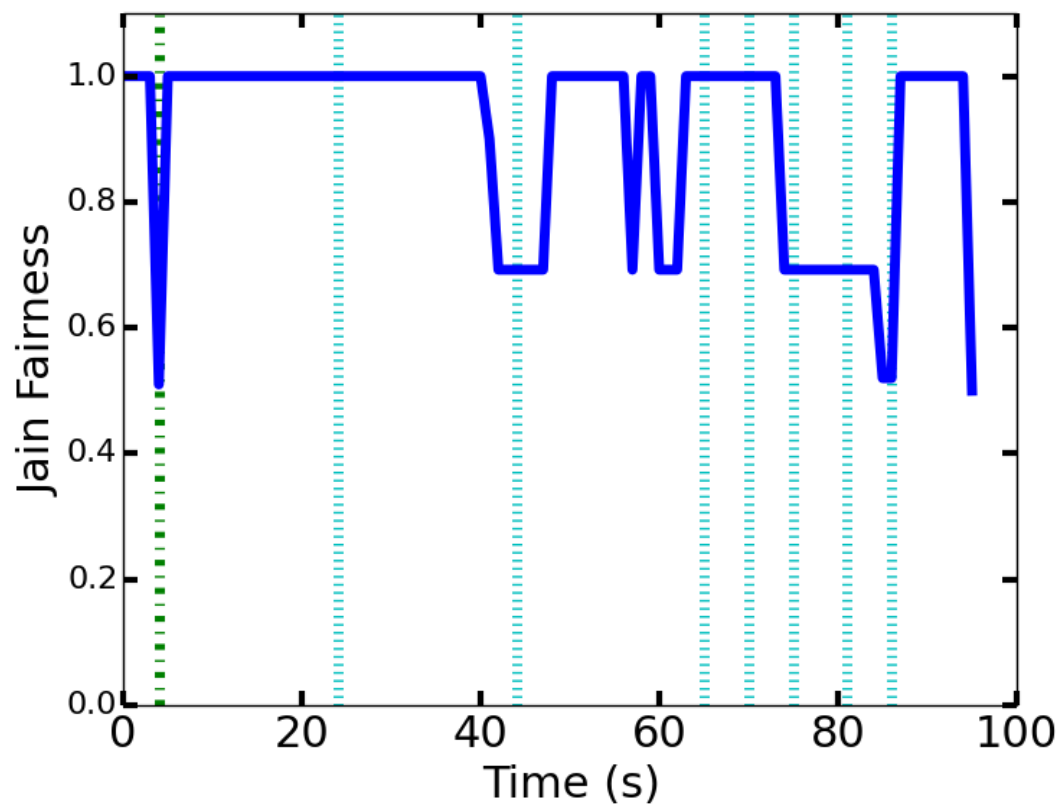


Figure 6: Fairness for  $\alpha = 0.5$

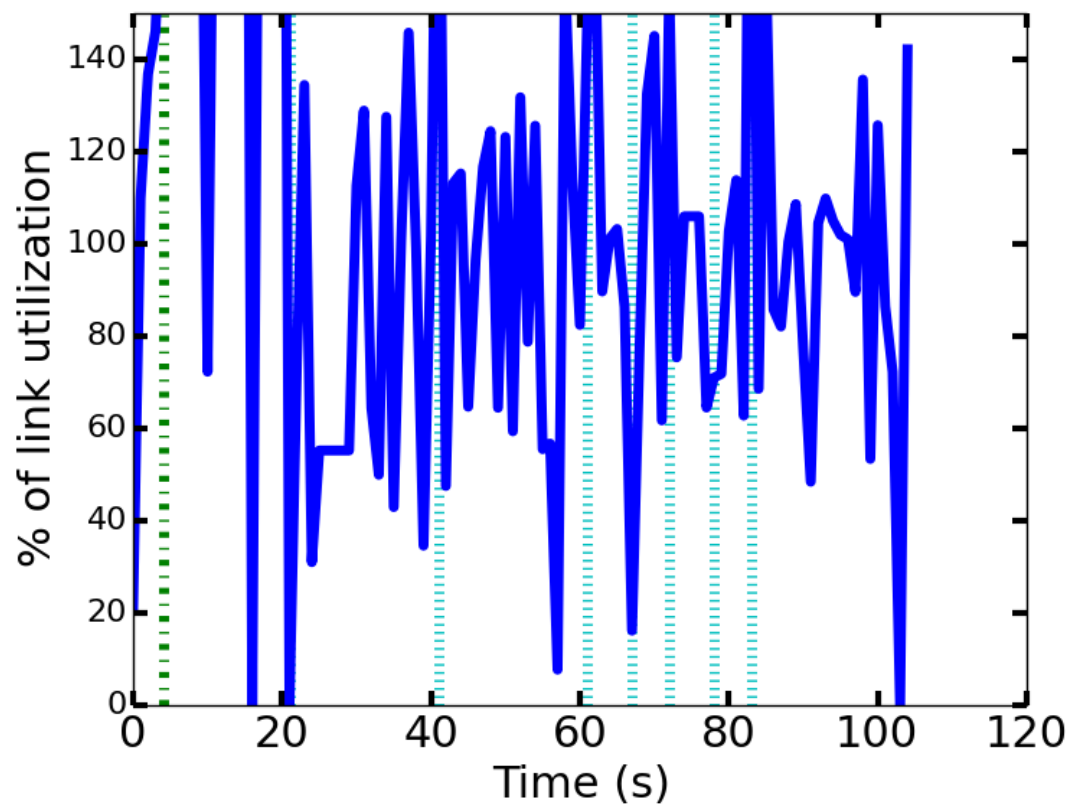


Figure 7: Utilization for  $\alpha = 0.9$



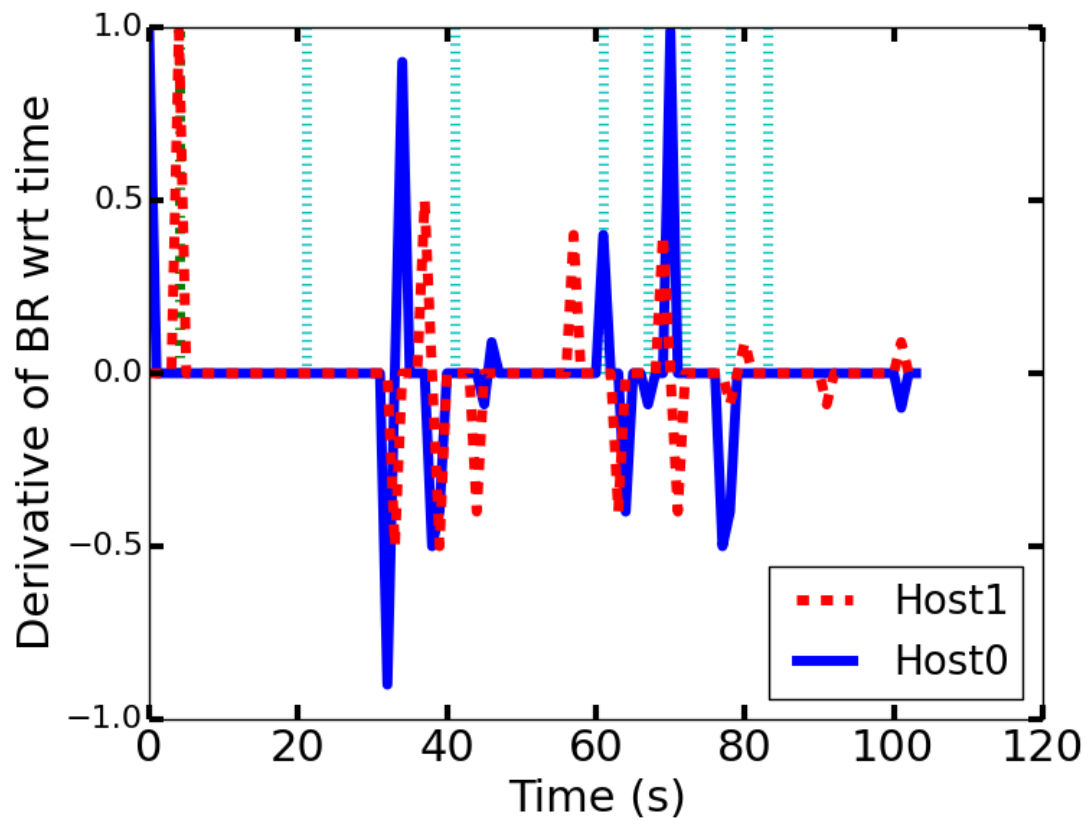


Figure 8: Smoothness for  $\alpha = 0.9$

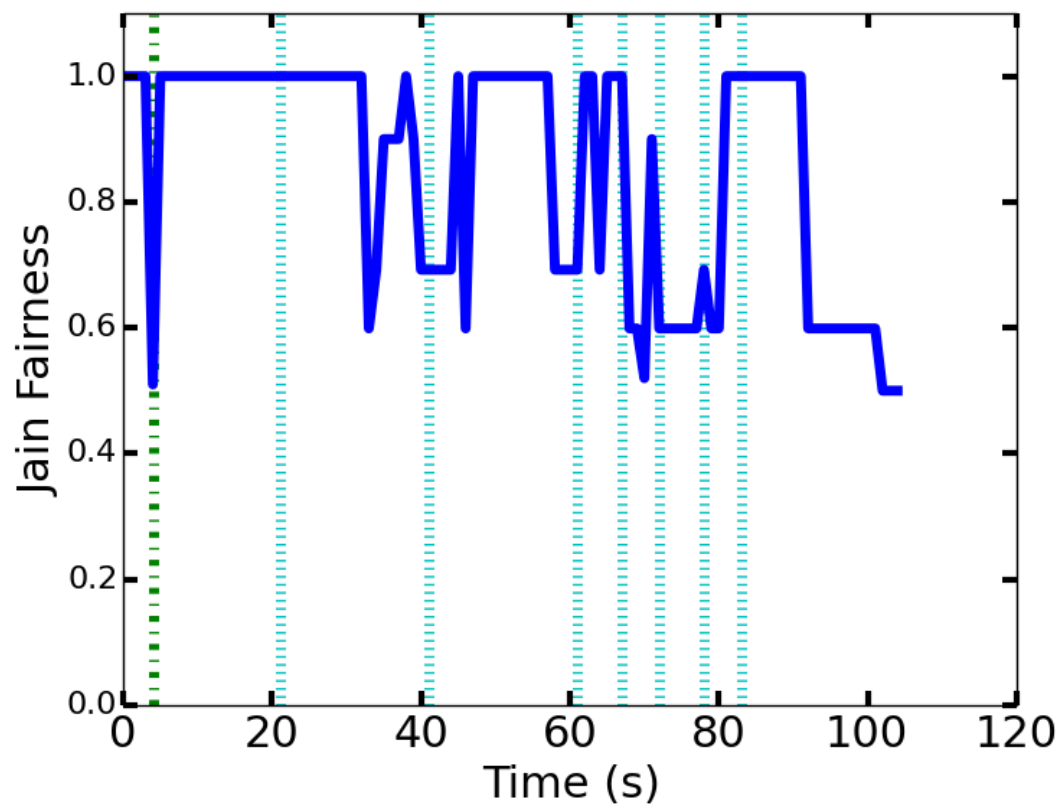


Figure 9: Fairness for  $\alpha = 0.9$