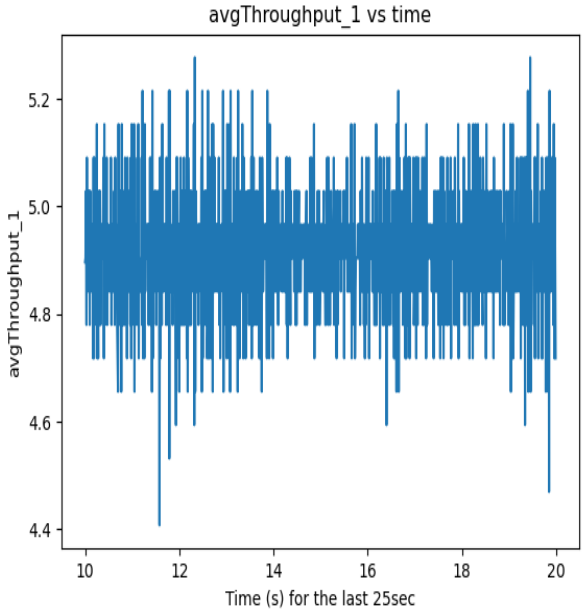
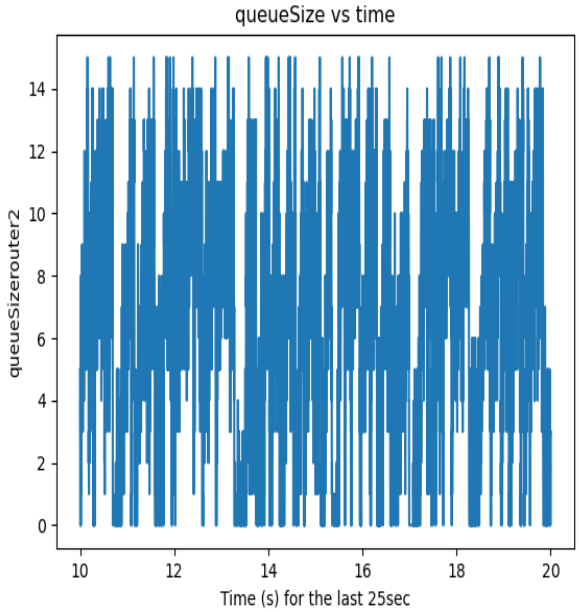
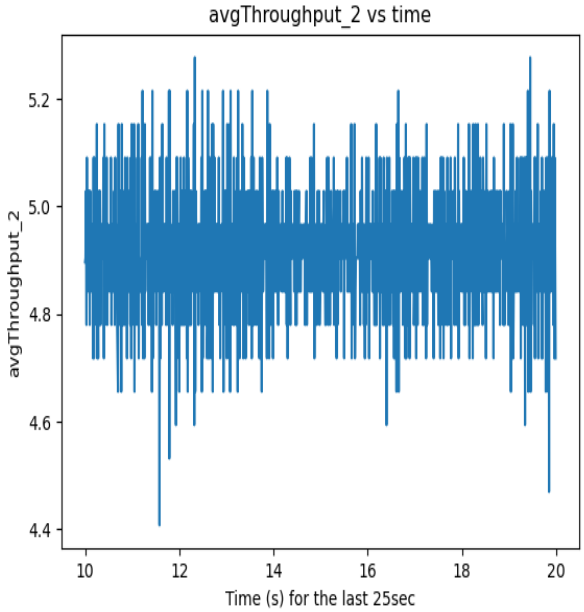
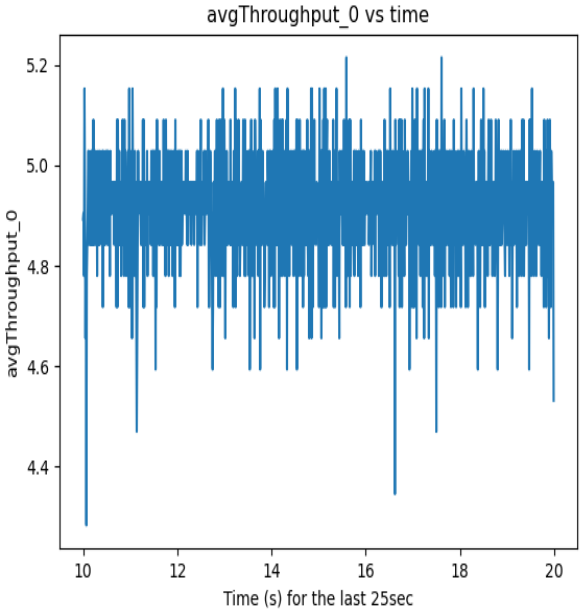
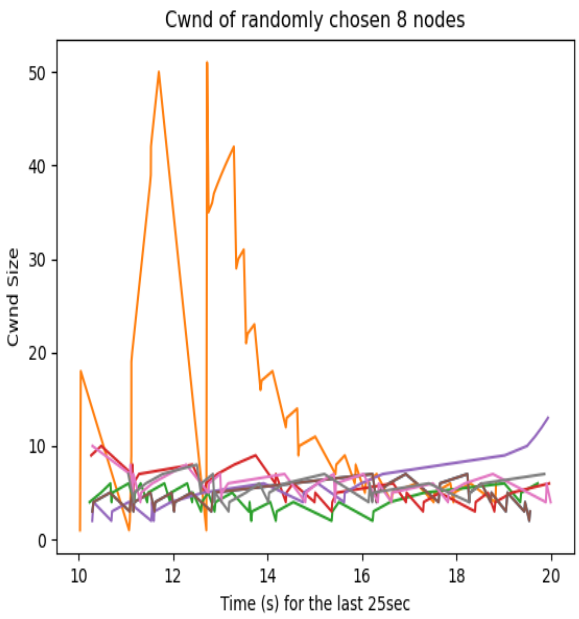
40-TcpBbr-10

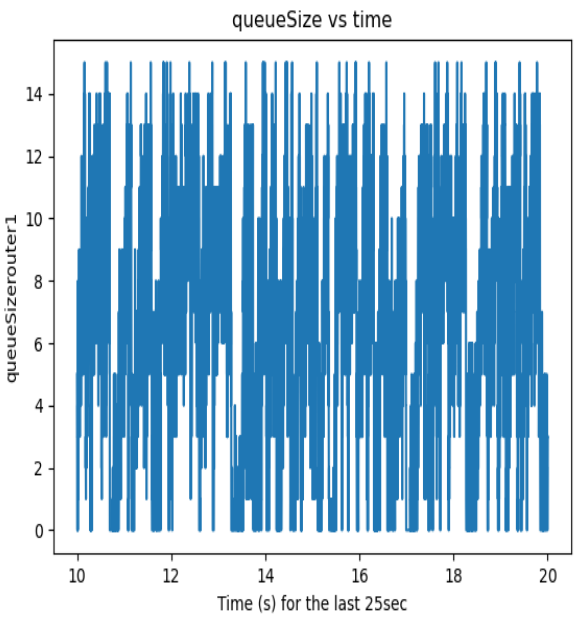

avgThroughput_1 vs time
avgThroughput_1
5.2
5.0
4.8
4.6
4.4
10
12
14
16
18
20
Time (s) for the last 25sec


queueSize vs time
queueSizerouter2
14
12
10
8
6
4
2
0
10
12
14
16
18
20
Time (s) for the last 25sec

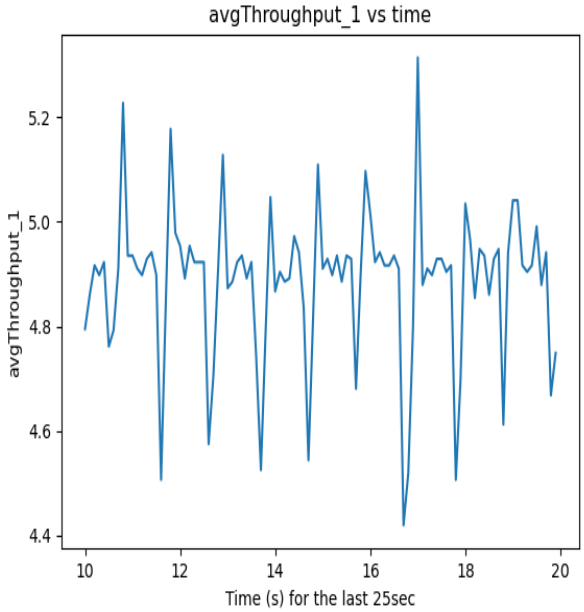

avgThroughput_2 vs time
avgThroughput_2
5.2
5.0
4.8
4.6
4.4
10
12
14
16
18
20
Time (s) for the last 25sec

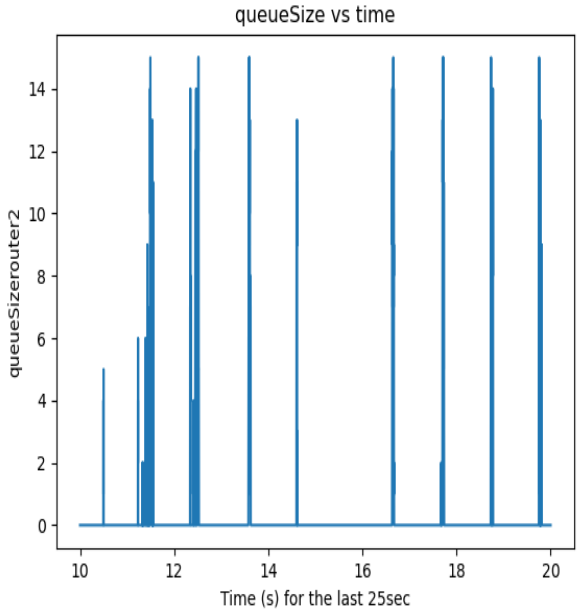

avgThroughput_0 vs time
avgThroughput_0
5.2
5.0
4.8
4.6
4.4
10
12
14
16
18
20
Time (s) for the last 25sec

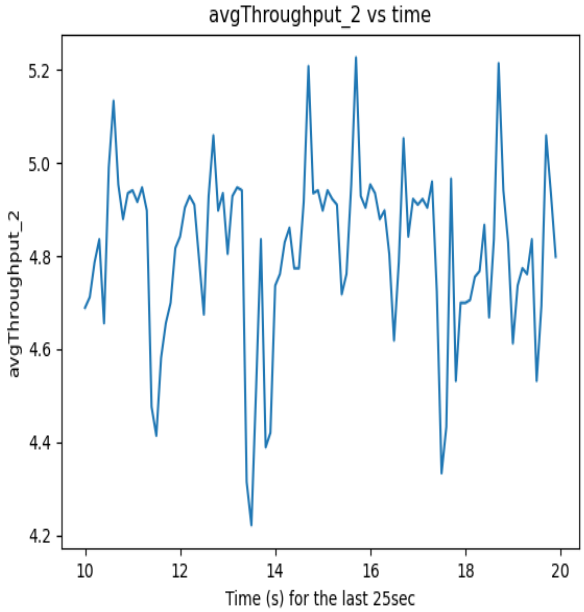

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
10
12
14
16
18
20

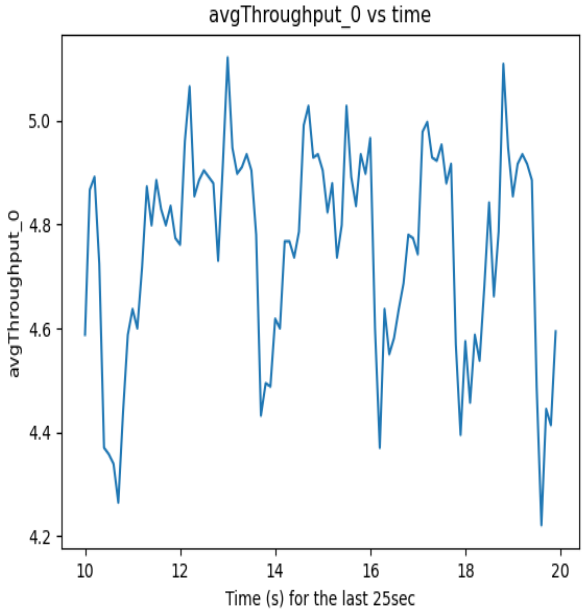

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

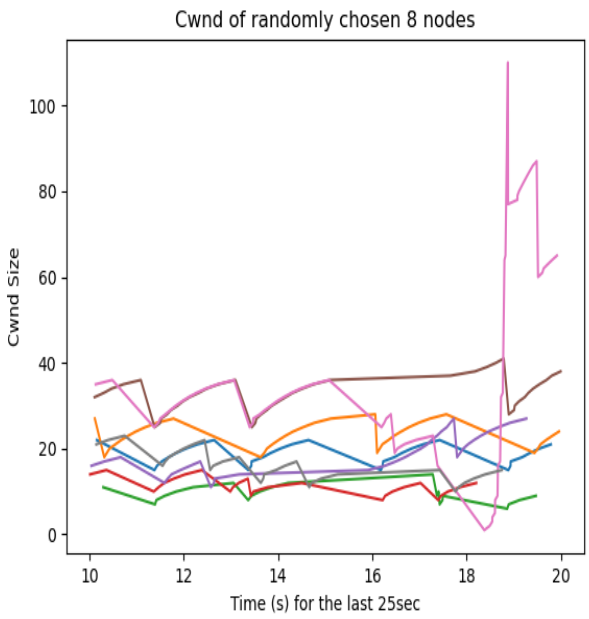
40-TcpBbr-100

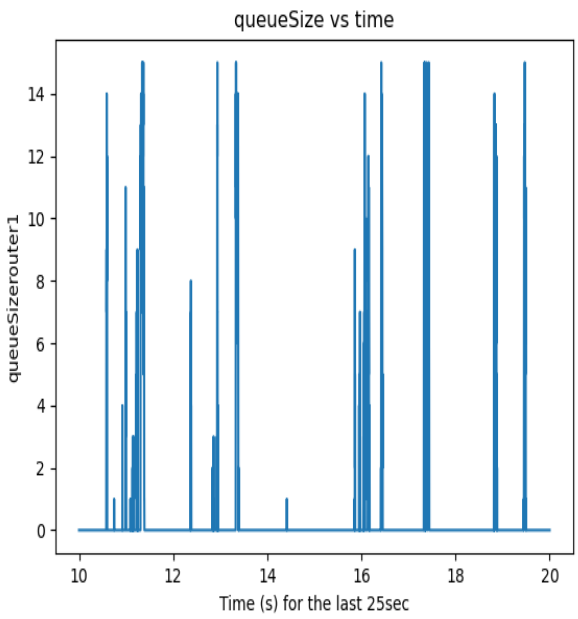




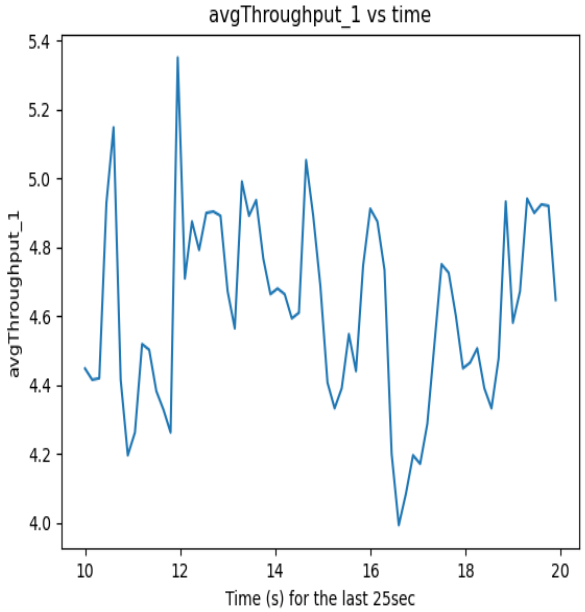


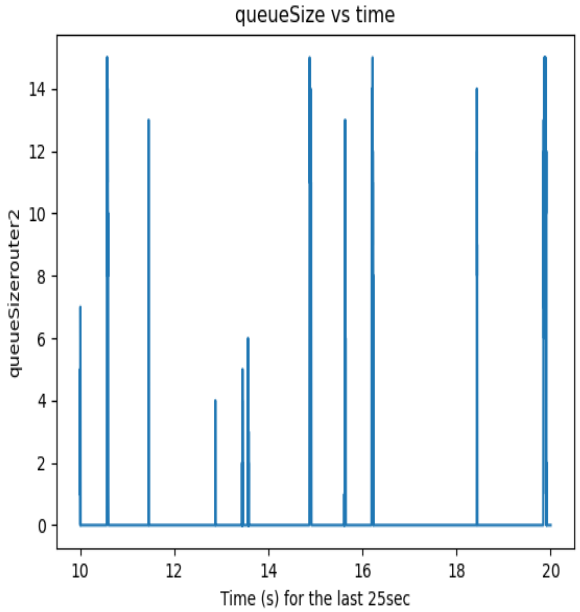


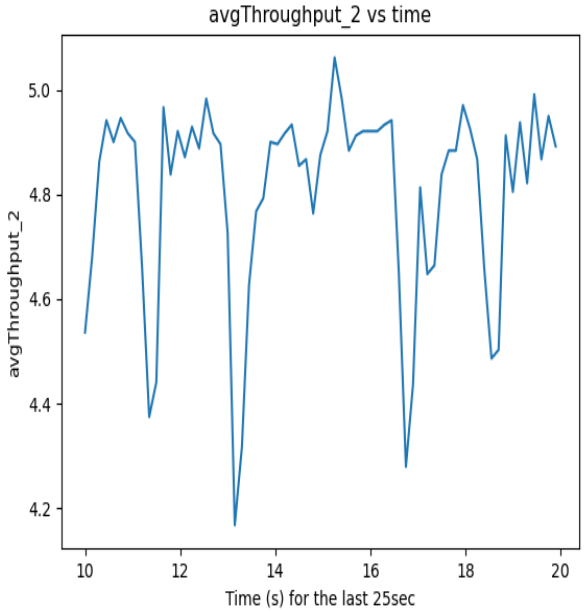

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
20
40
60
80
100
10
12
14
16
18
20

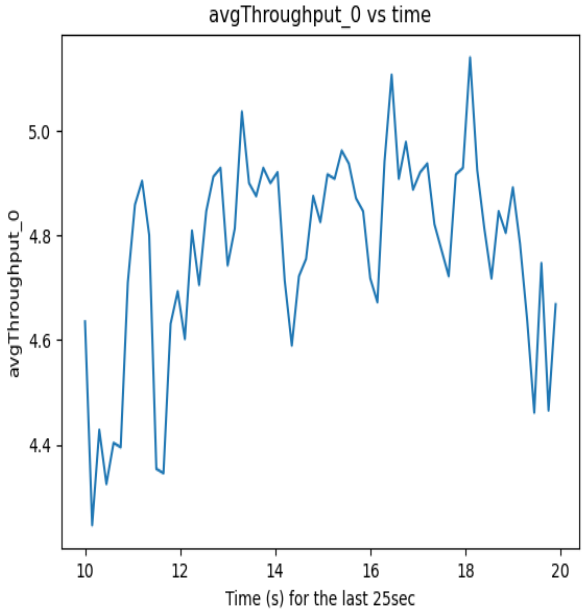

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

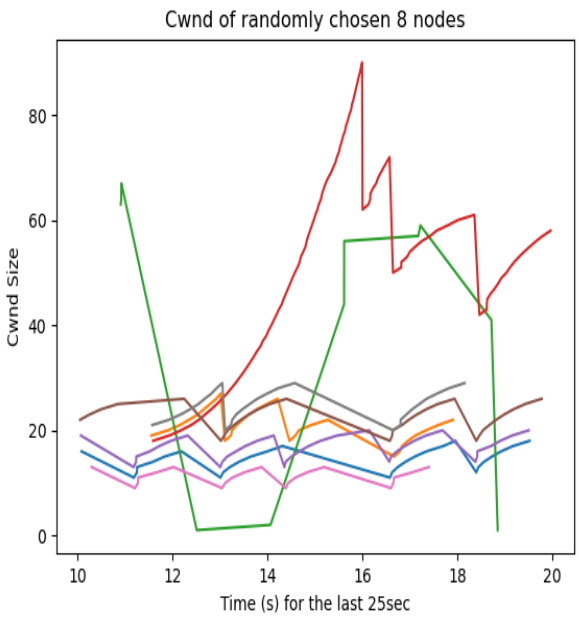
40-TcpBbr-150

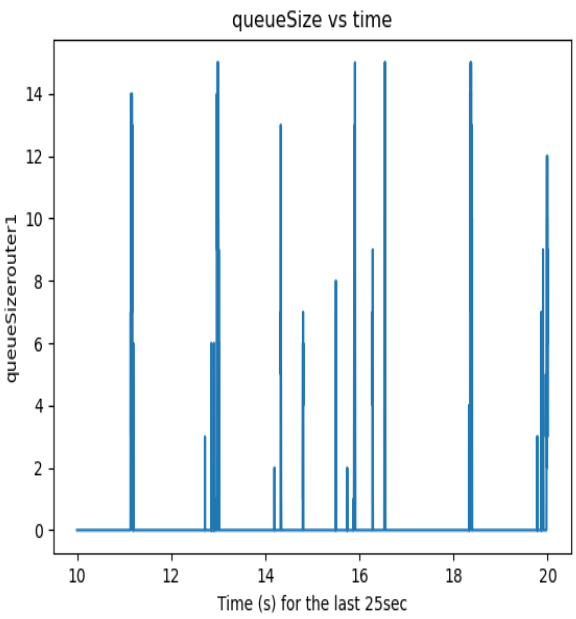




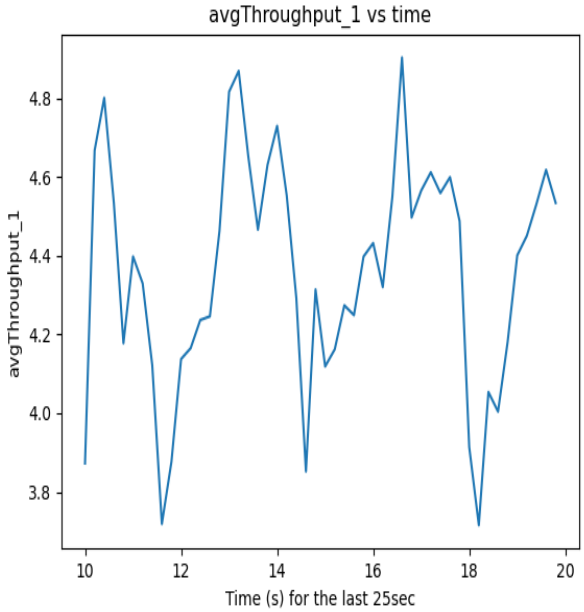


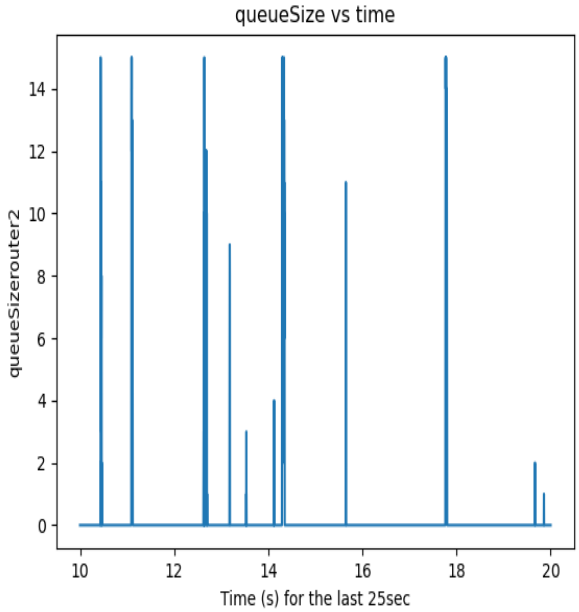


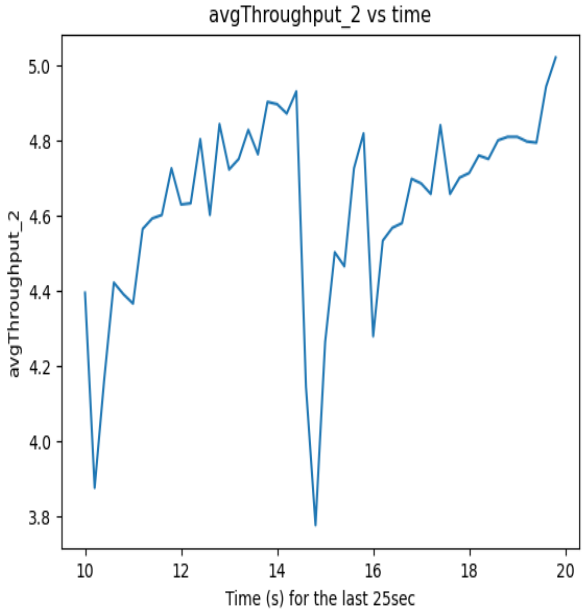

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
20
40
60
80
10
12
14
16
18
20

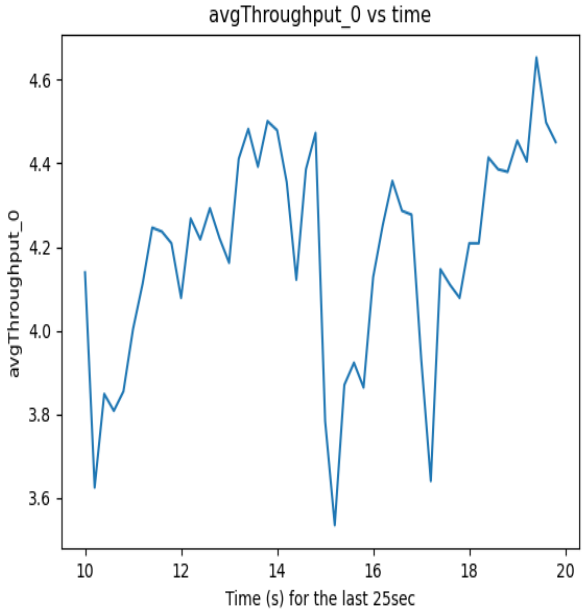

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

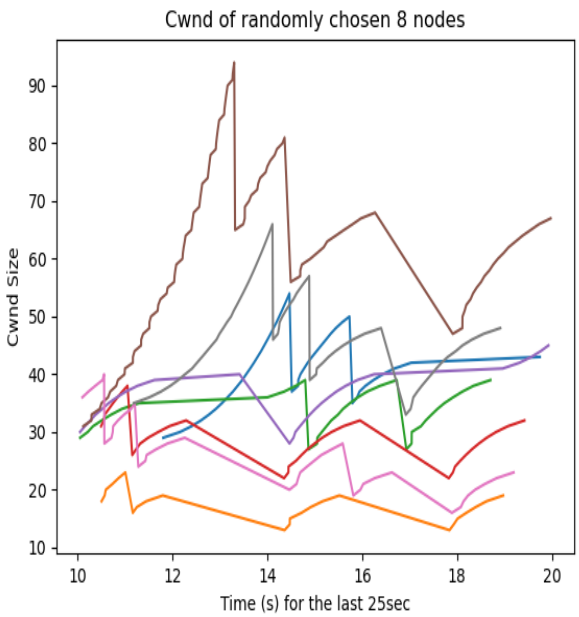
40-TcpBbr-200

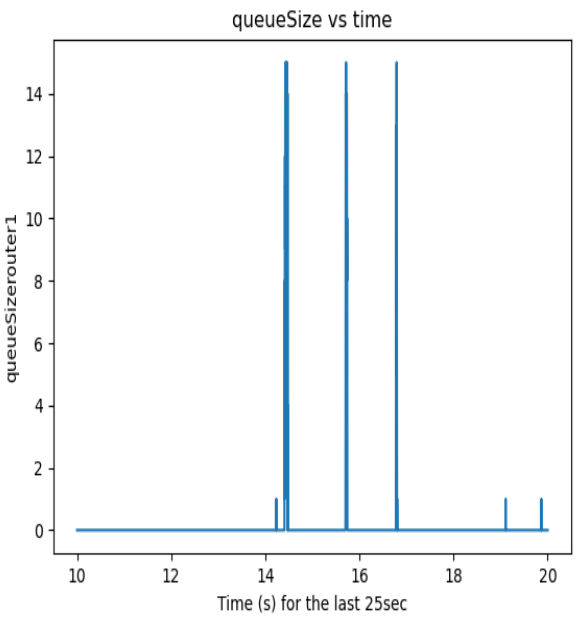




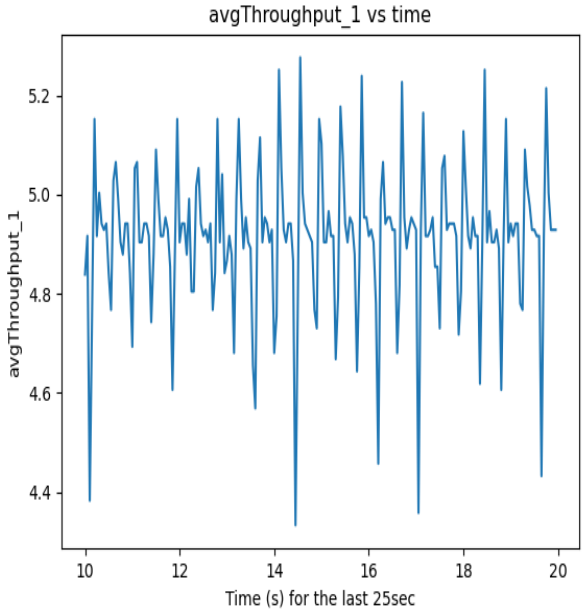


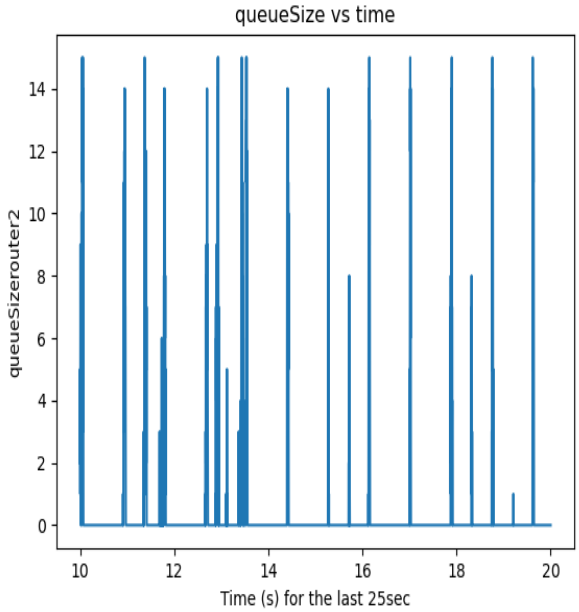


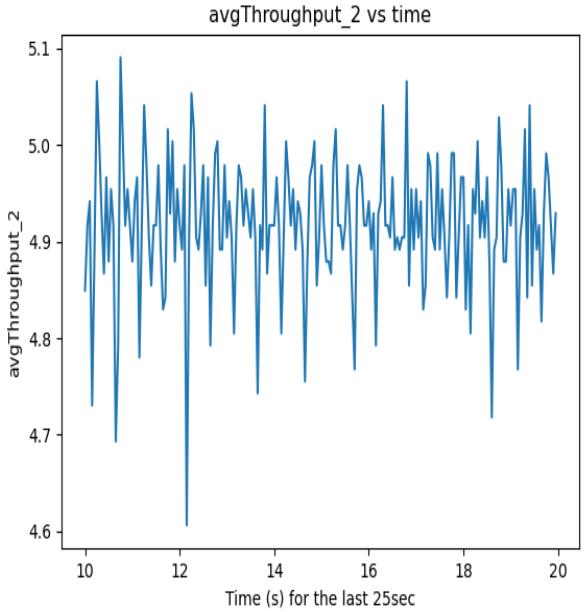

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
10
12
14
16
18
20
10
20
30
40
50
60
70
80
90

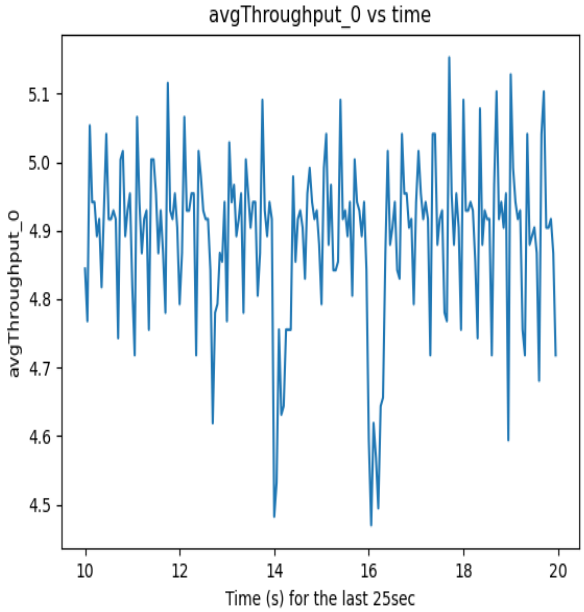

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
10
12
14
16
18
20
0
2
4
6
8
10
12
14

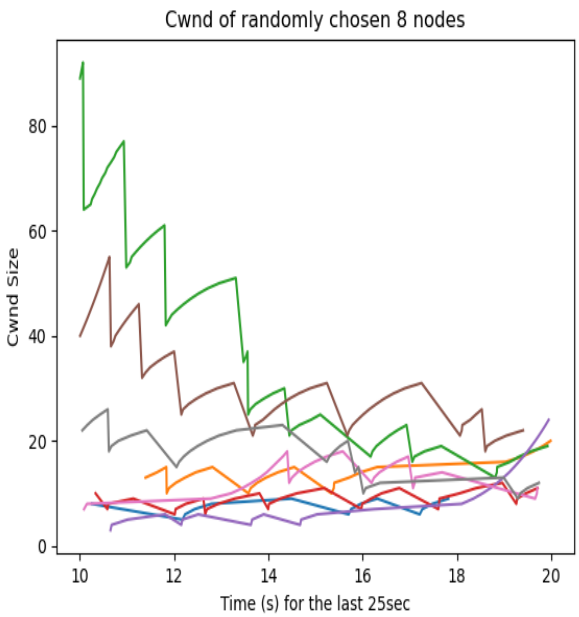
40-TcpBbr-50

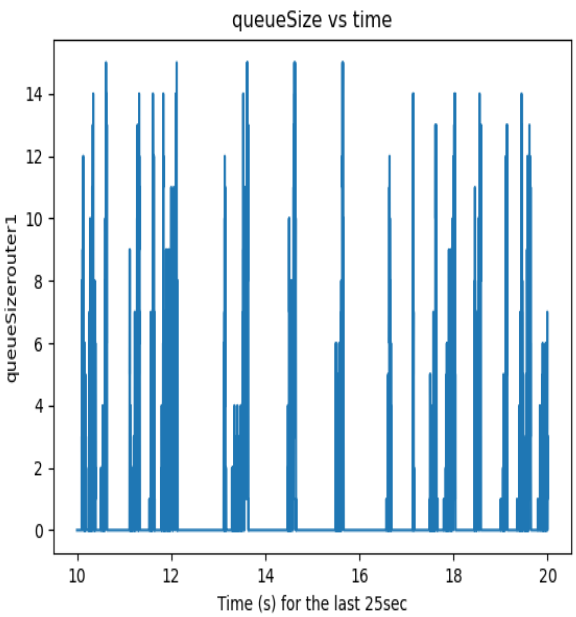

avgThroughput_1 vs time
avgThroughput_1
5.2
5.0
4.8
4.6
4.4
10
12
14
16
18
20
Time (s) for the last 25sec


queueSize vs time
queueSizerouter2
14
12
10
8
6
4
2
0
10
12
14
16
18
20
Time (s) for the last 25sec

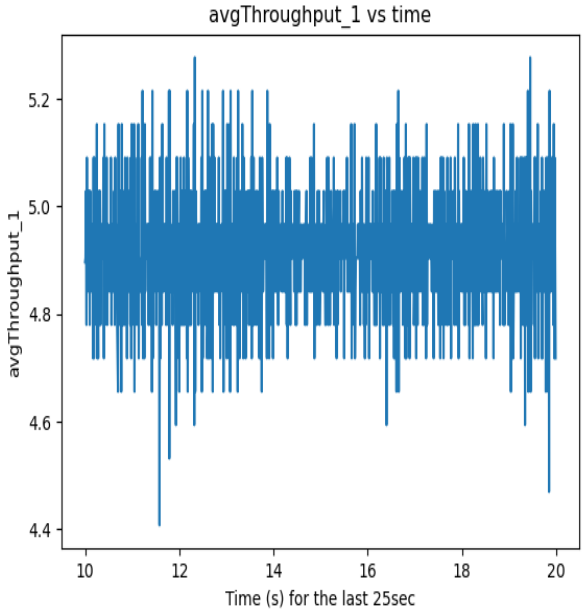

avgThroughput_2 vs time
avgThroughput_2
5.1
5.0
4.9
4.8
4.7
4.6
10
12
14
16
18
20
Time (s) for the last 25sec

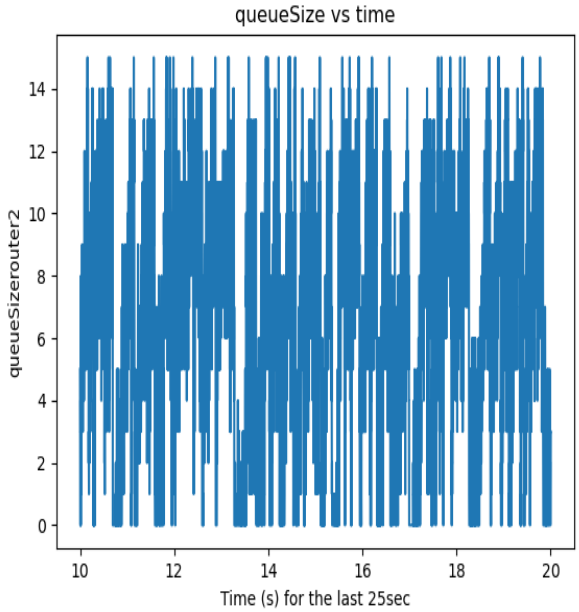

avgThroughput_0 vs time
avgThroughput_0
5.1
5.0
4.9
4.8
4.7
4.6
4.5
10
12
14
16
18
20
Time (s) for the last 25sec

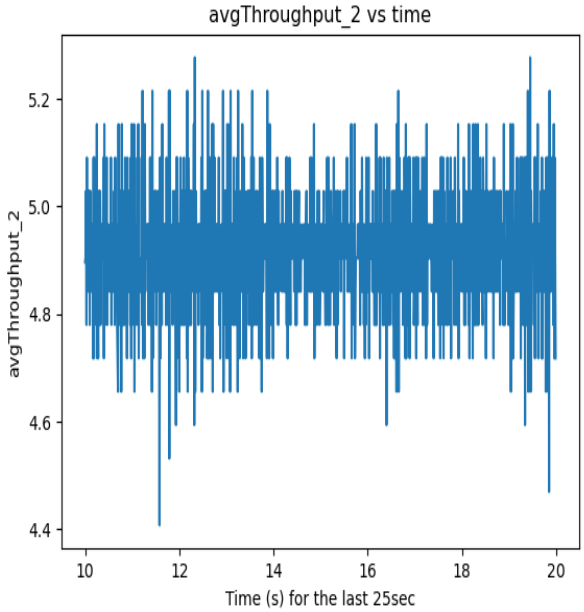

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
20
40
60
80
10
12
14
16
18
20

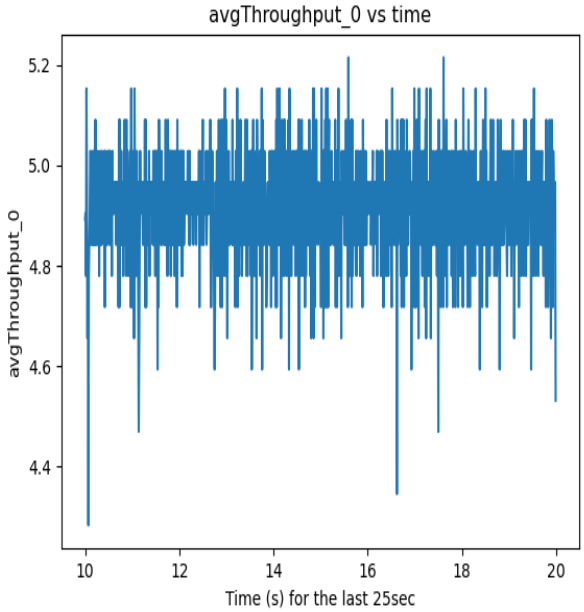

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

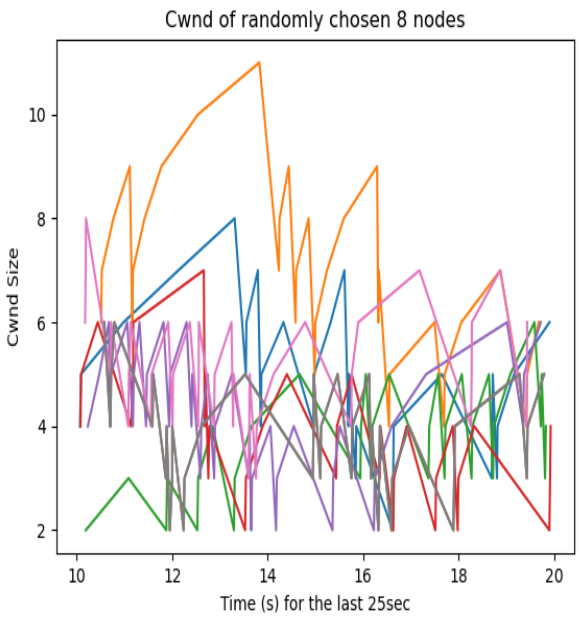
40-TcpCubic-10

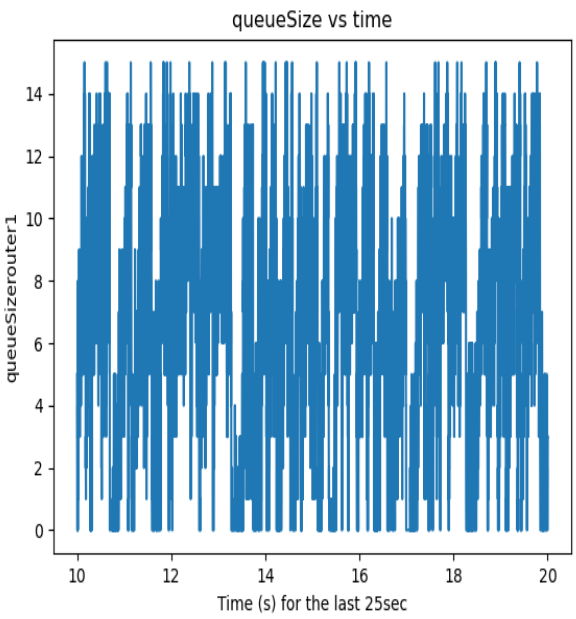




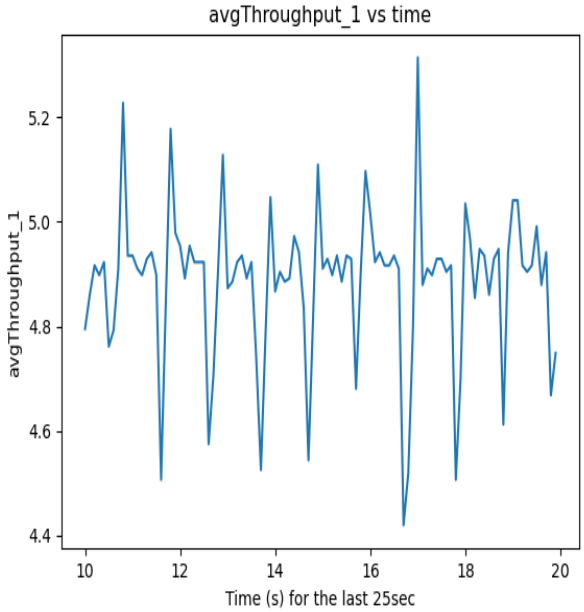


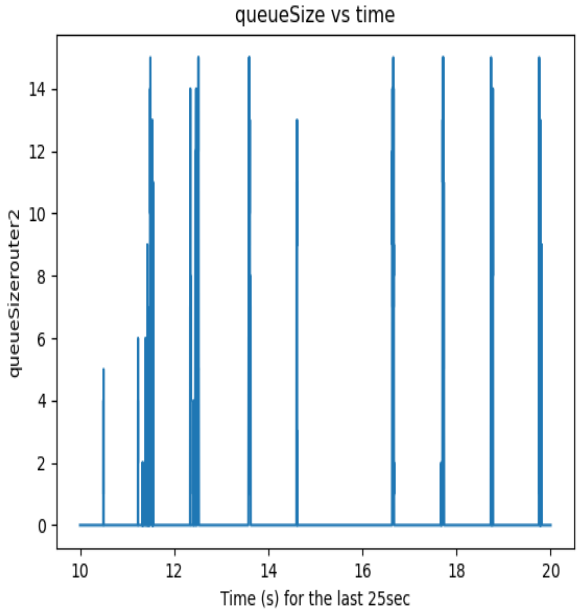


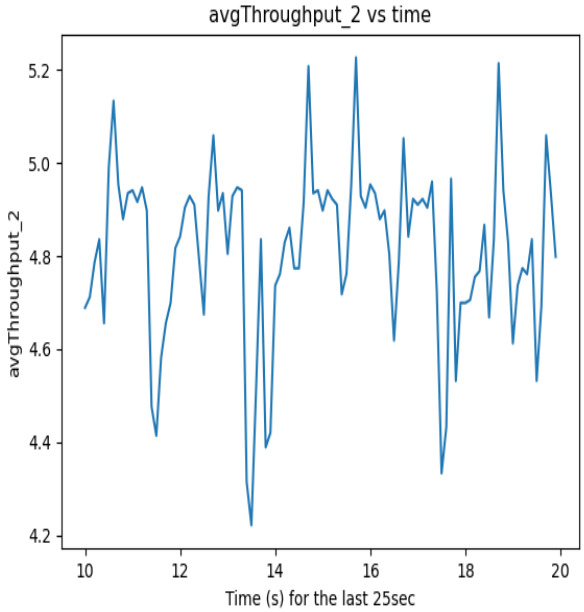

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
10
8
6
4
2
10
12
14
16
18
20

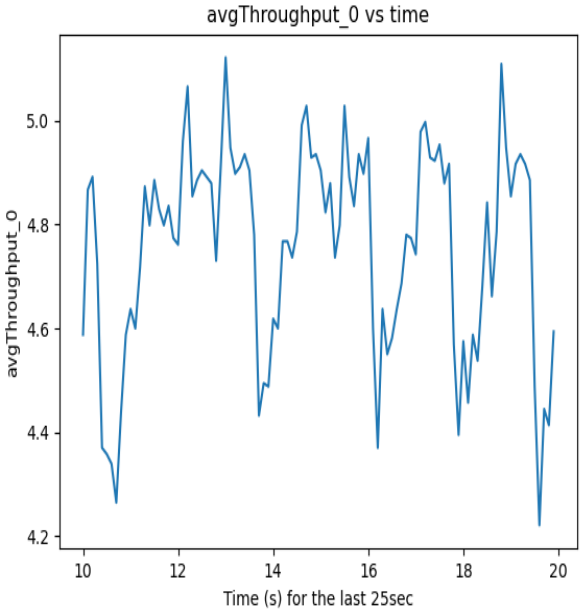

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

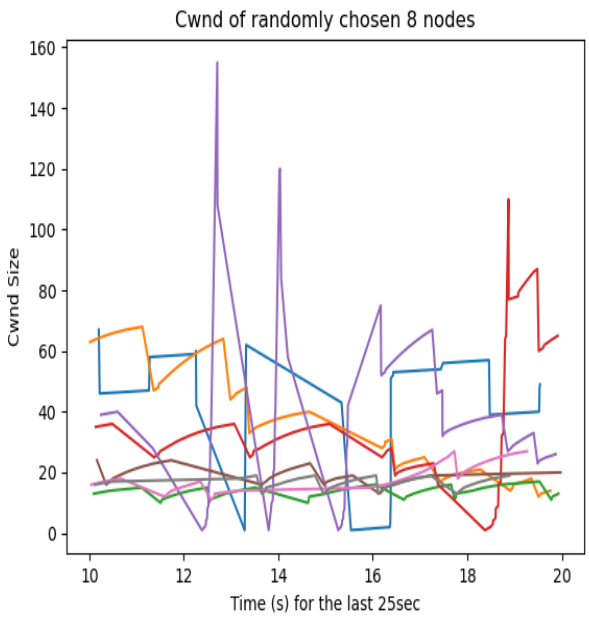
40-TcpCubic-100

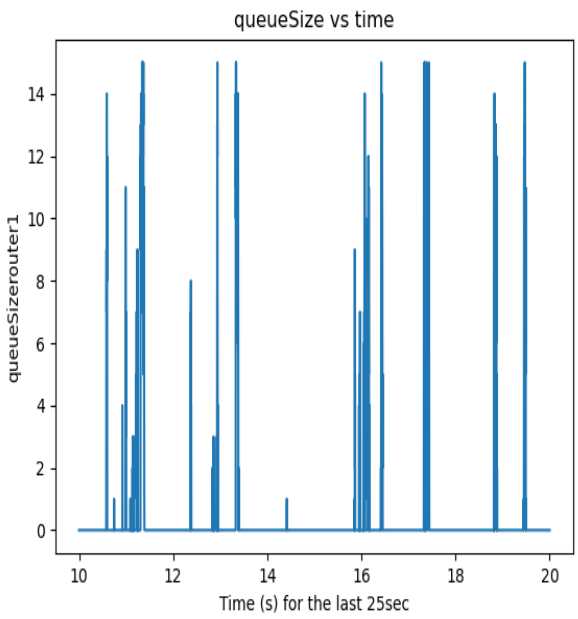




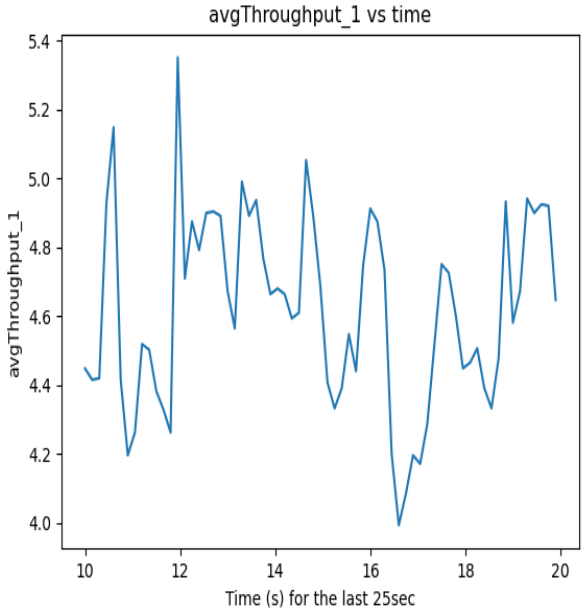


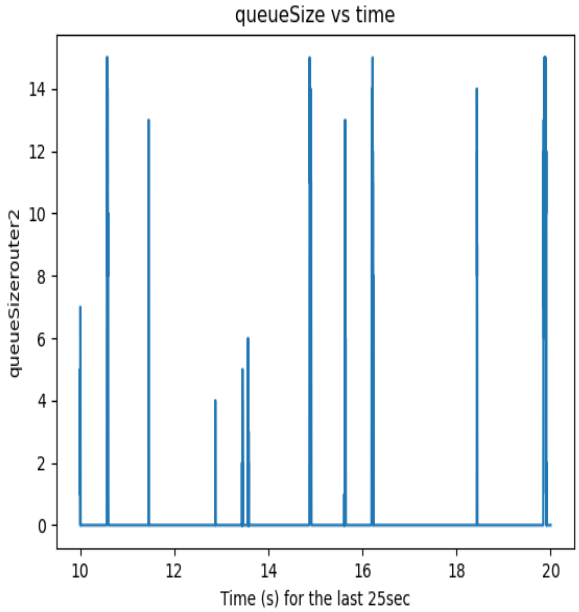


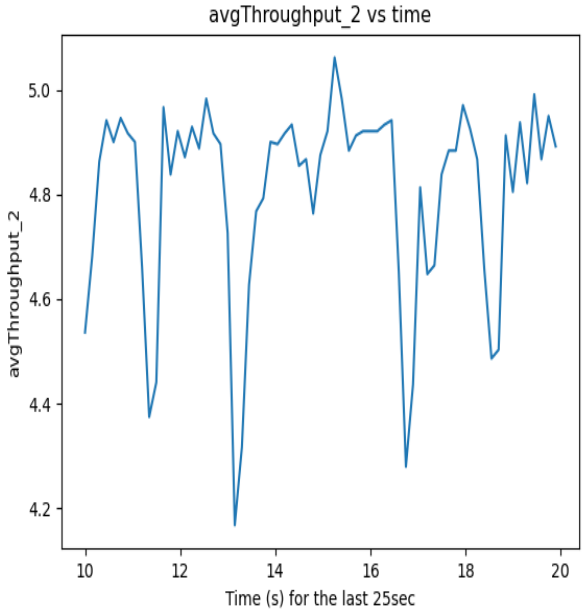

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
20
40
60
80
100
120
140
160
10
12
14
16
18
20

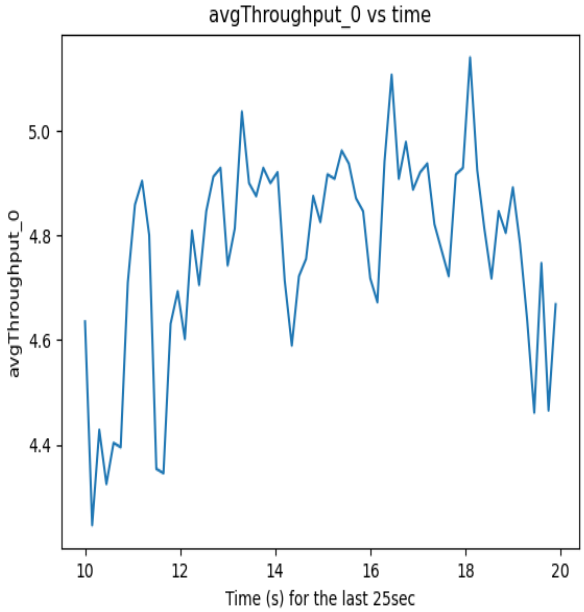

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

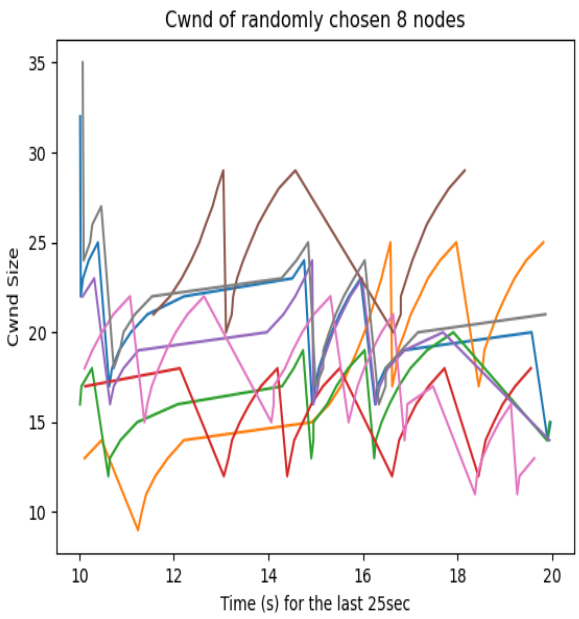
40-TcpCubic-150

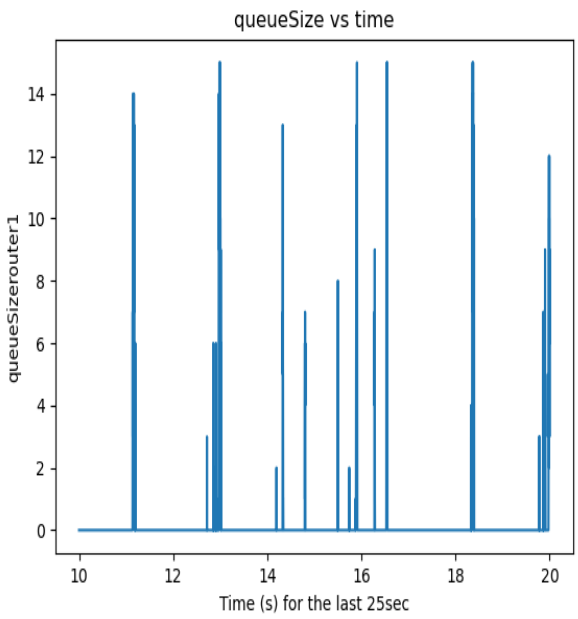




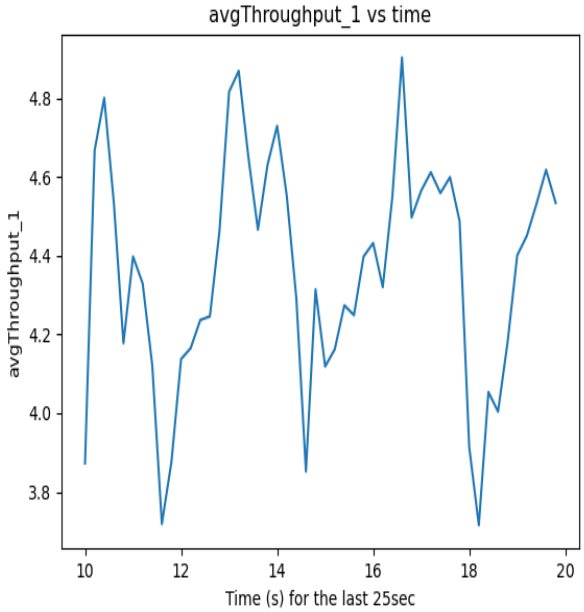


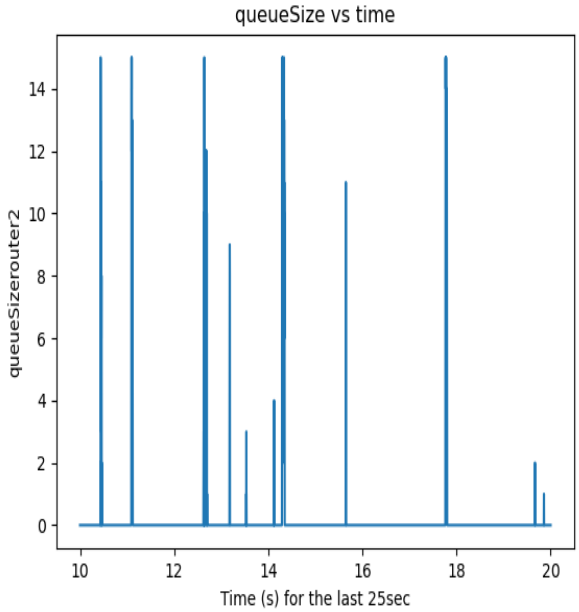


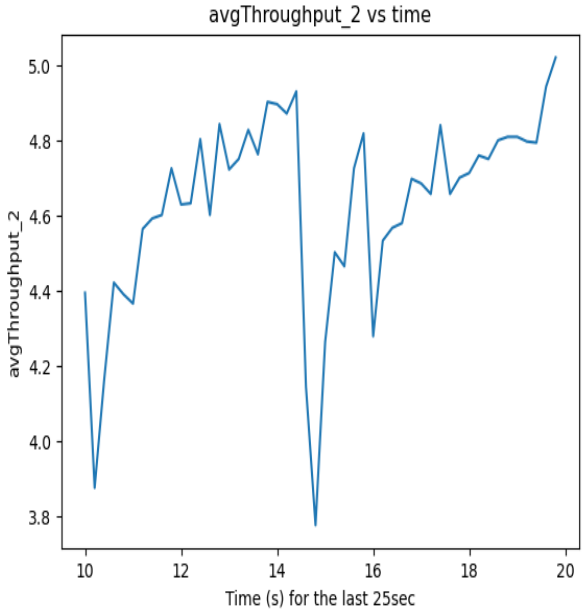

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
35
30
25
20
15
10
10
12
14
16
18
20

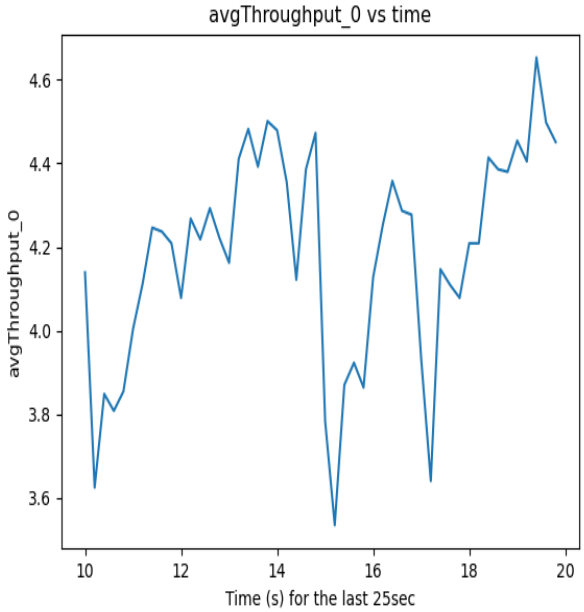

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

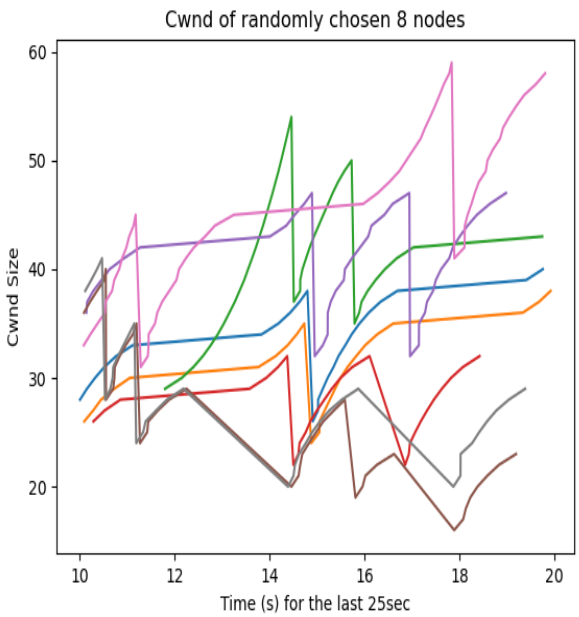
40-TcpCubic-200

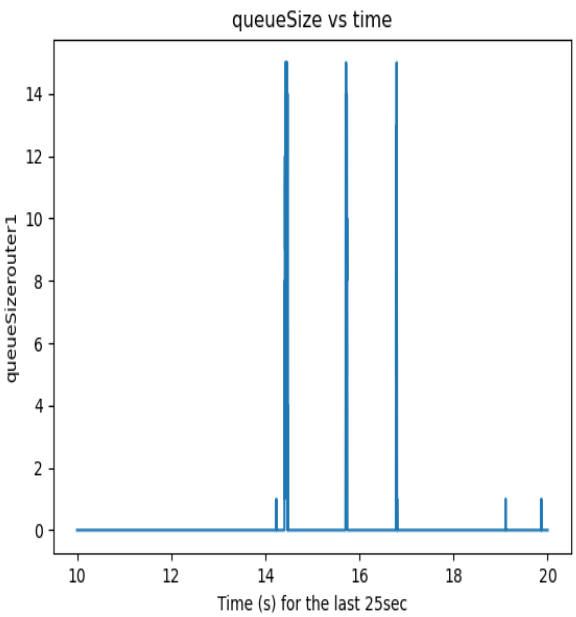




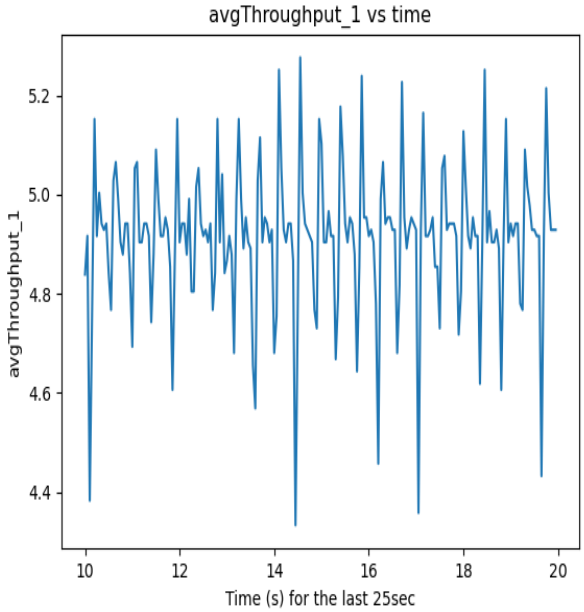


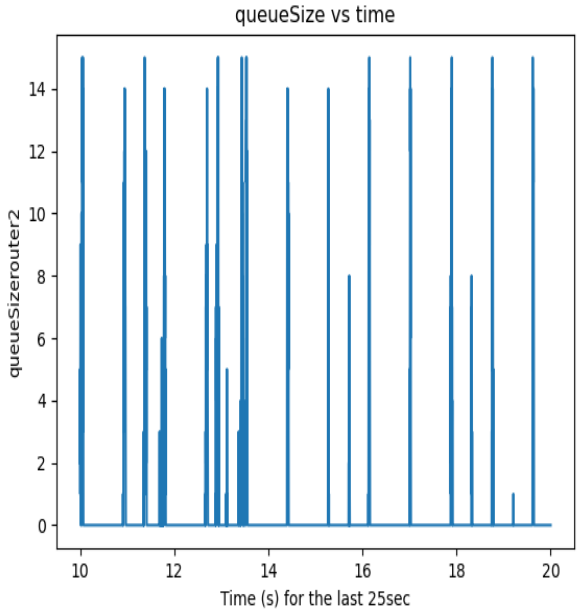


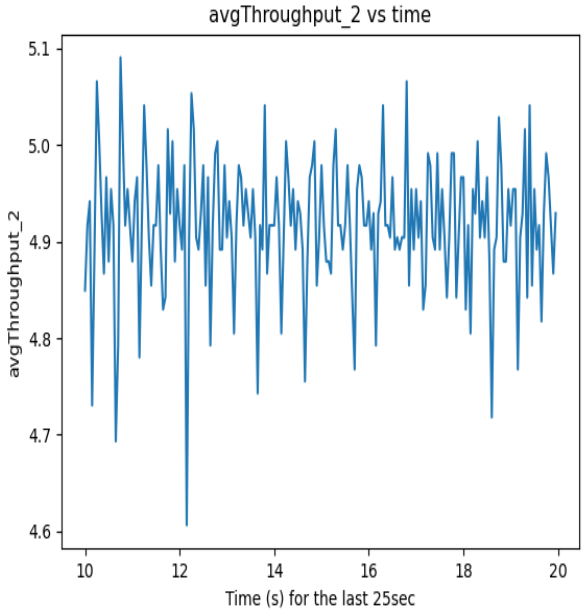

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
60
50
40
30
20
10
12
14
16
18
20

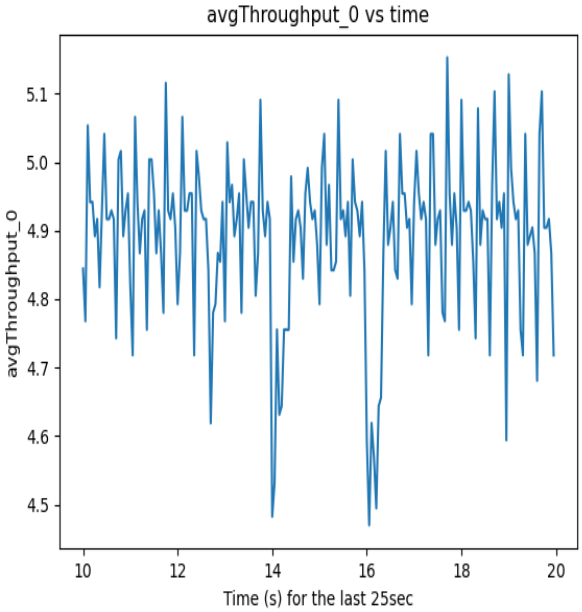

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

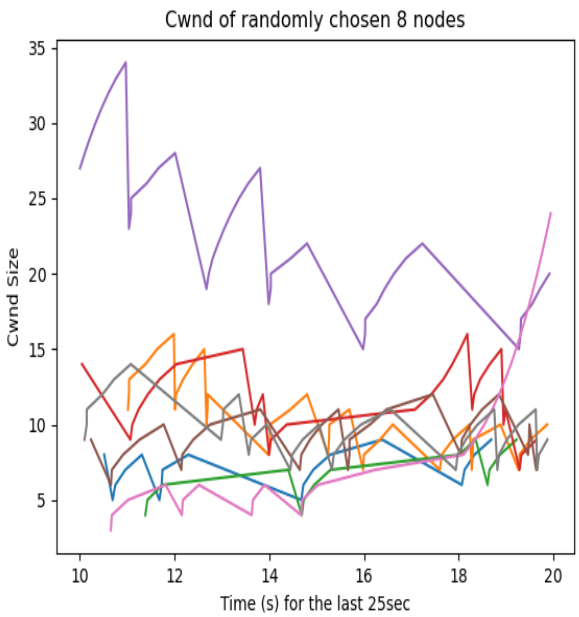
40-TcpCubic-50

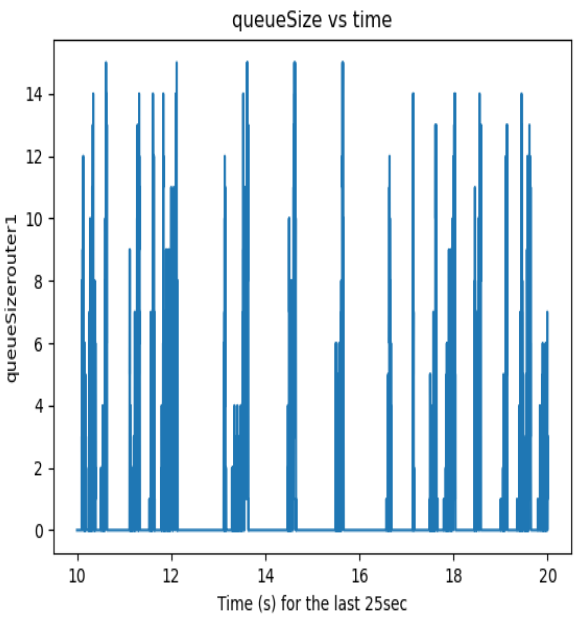




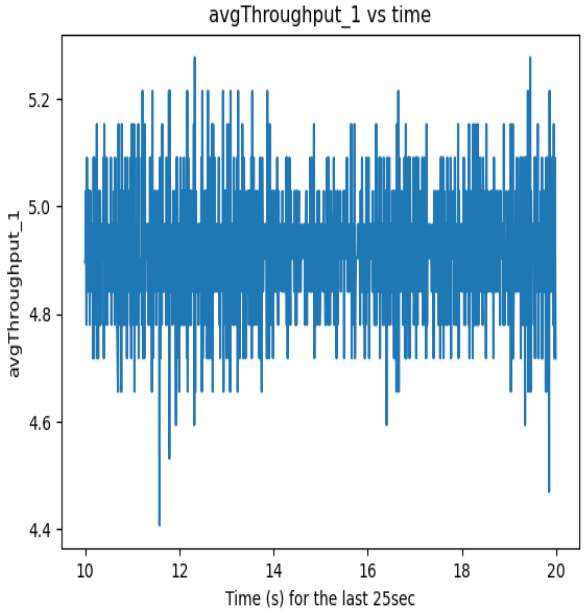


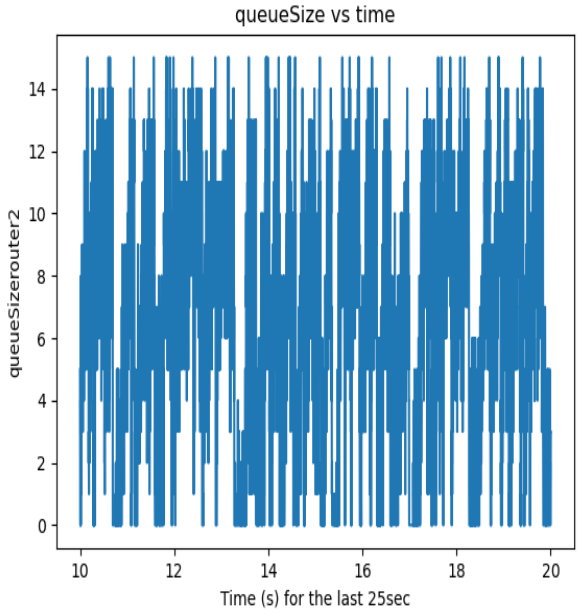


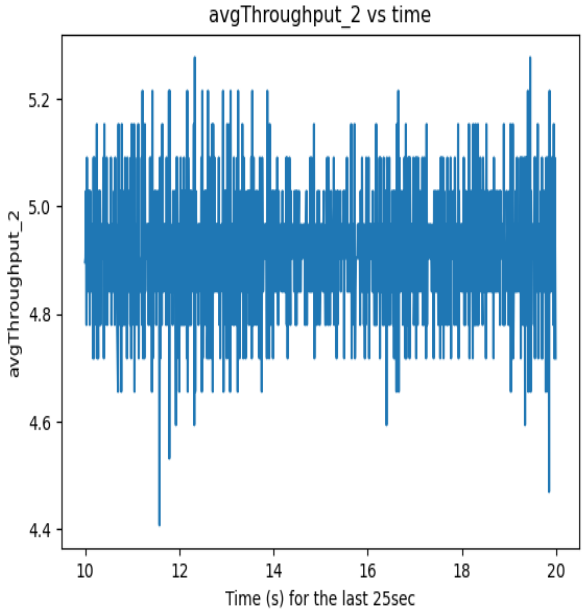

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

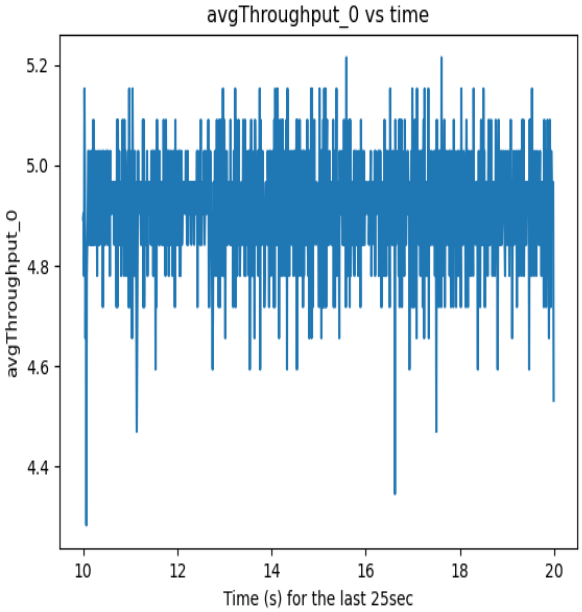

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

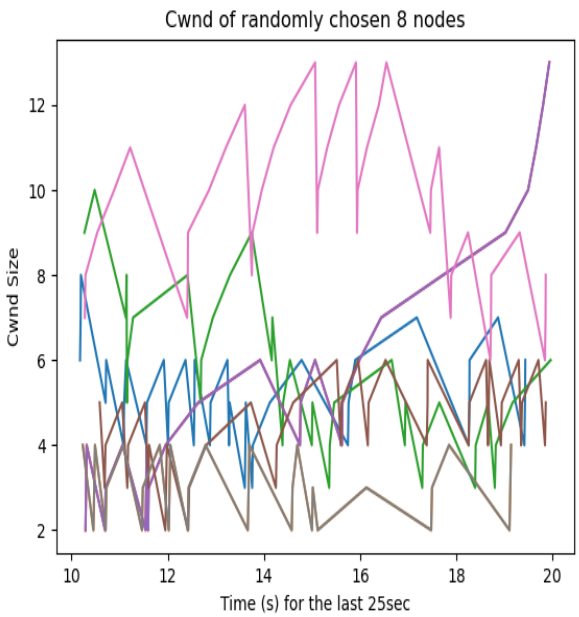
40-TcpNewReno-10

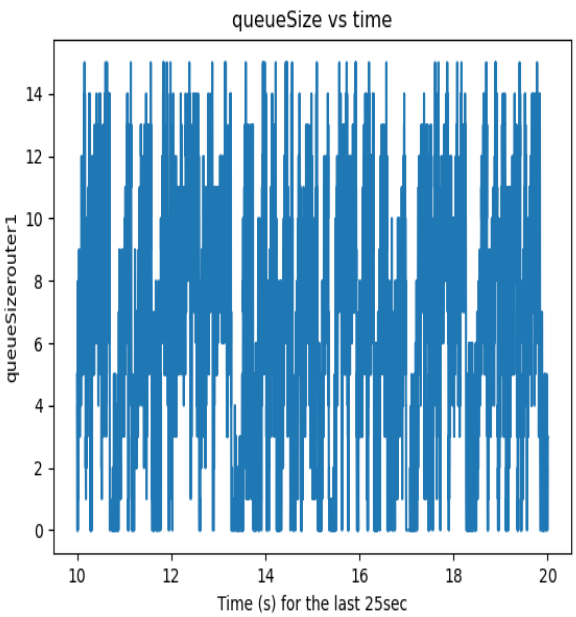




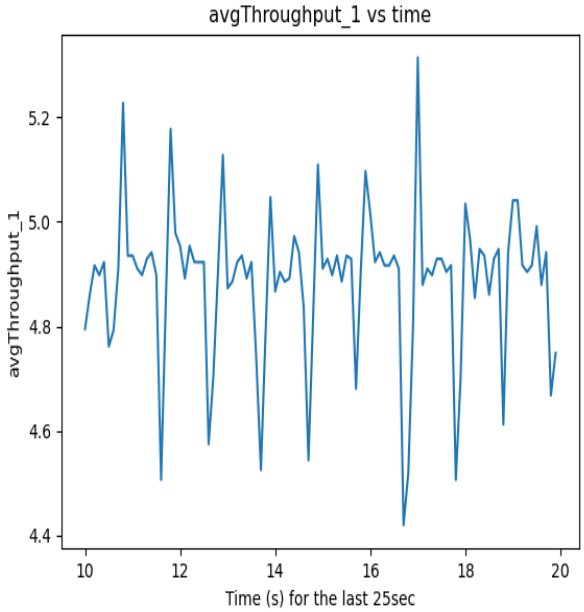


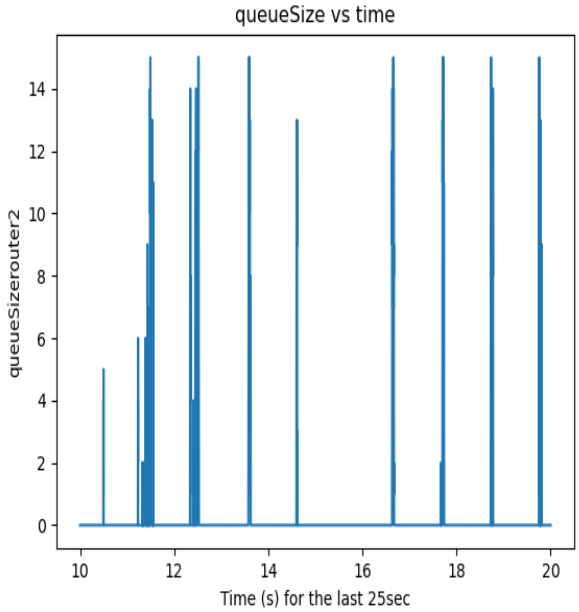


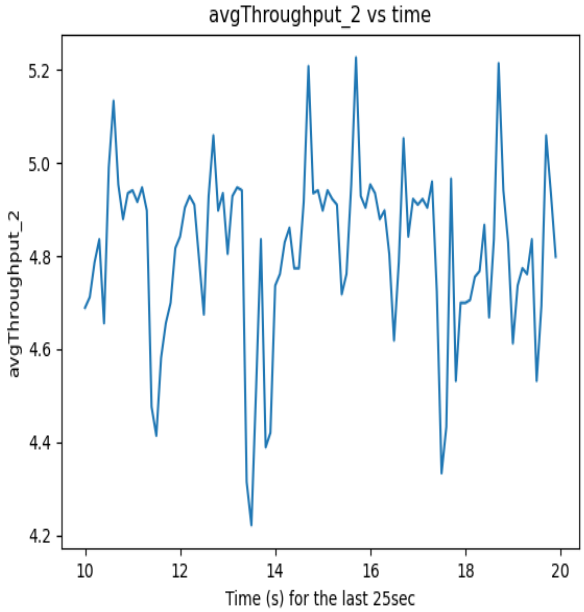

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
2
4
6
8
10
12
10
12
14
16
18
20

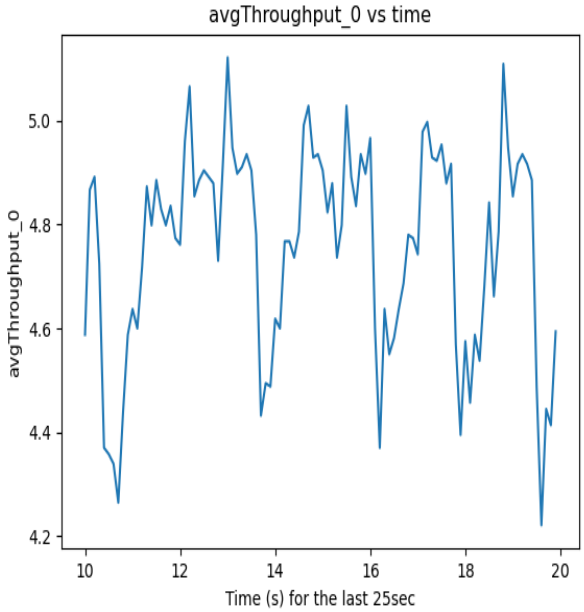

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

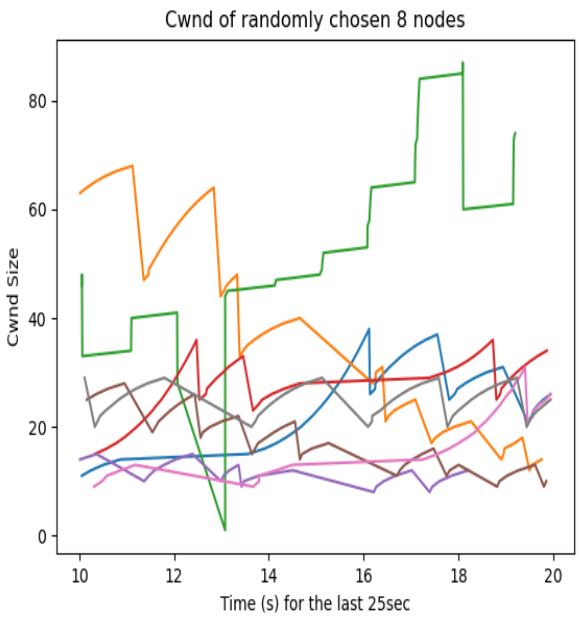
40-TcpNewReno-100

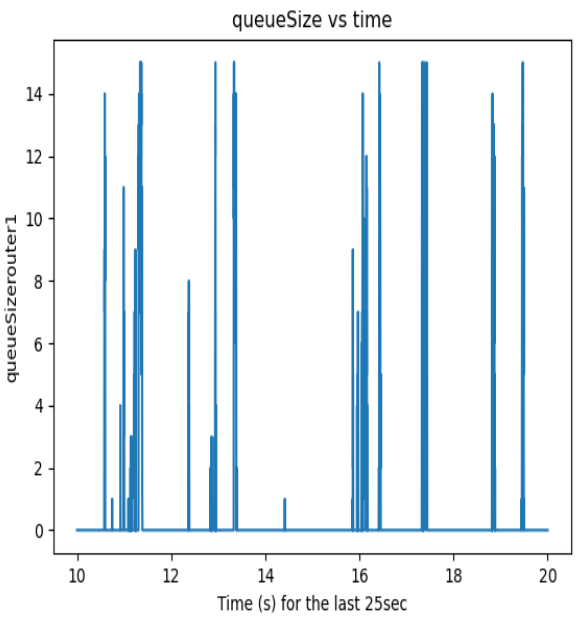




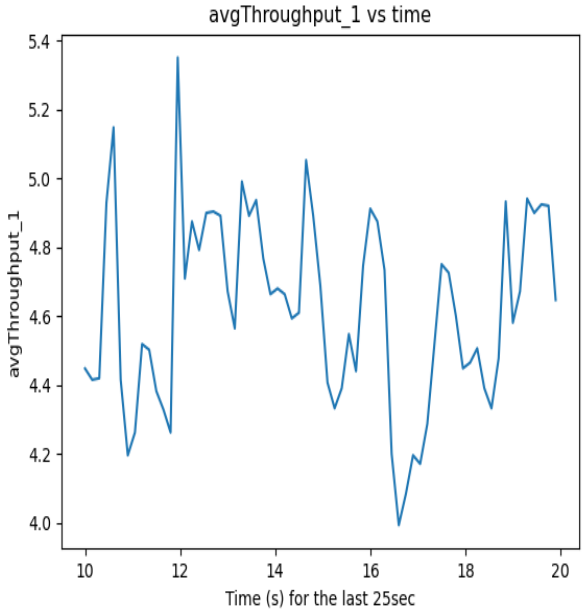


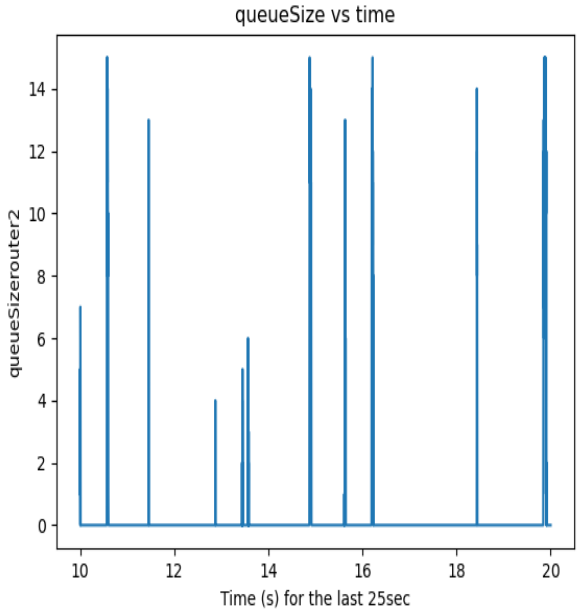


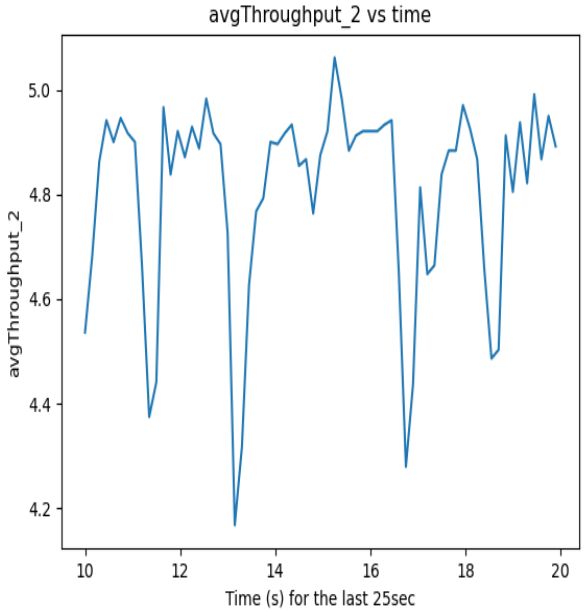

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
20
40
60
80
10
12
14
16
18
20

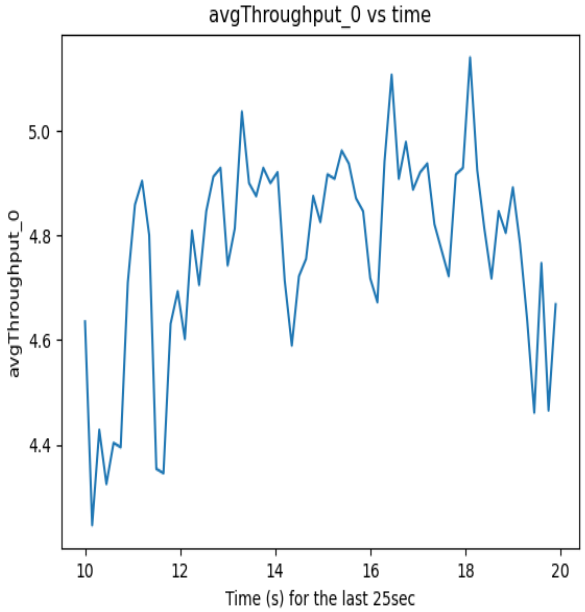

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

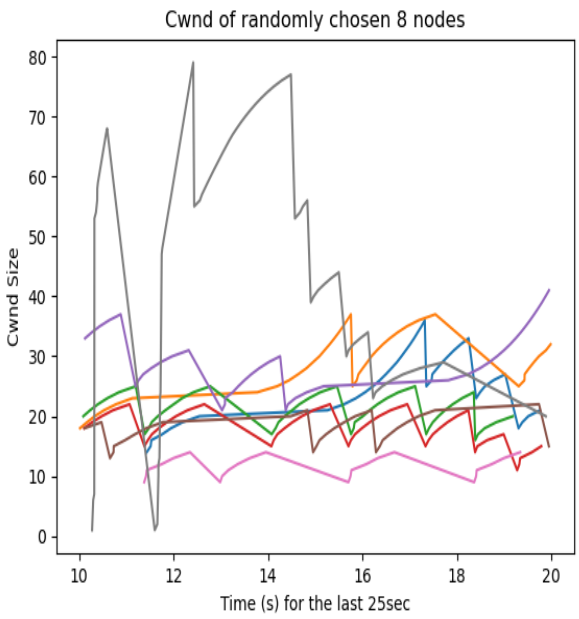
40-TcpNewReno-150

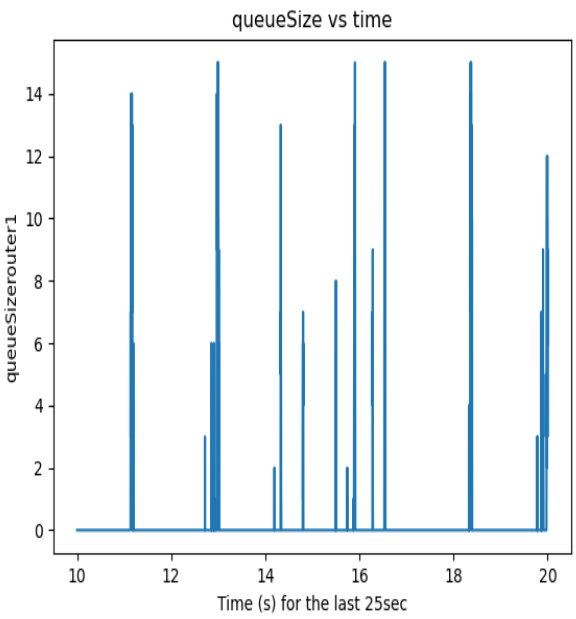




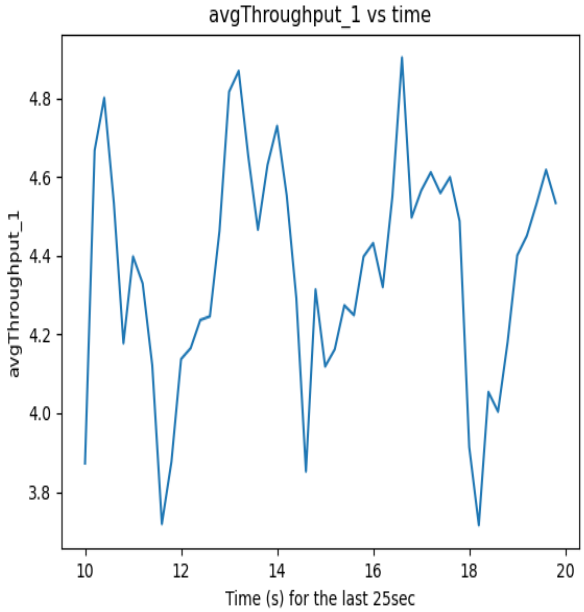


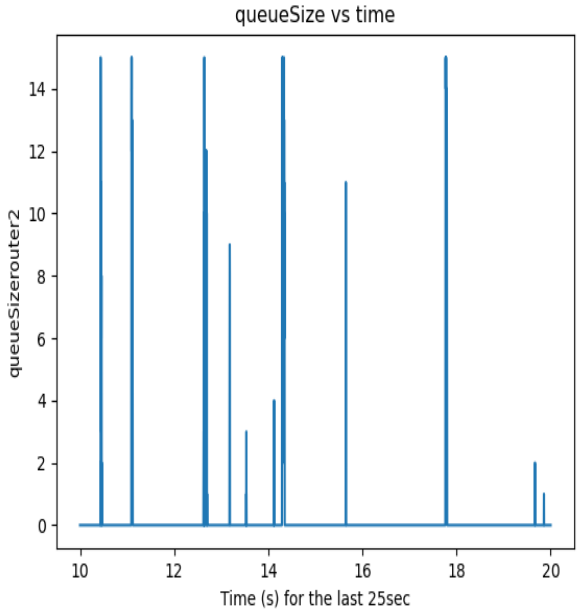


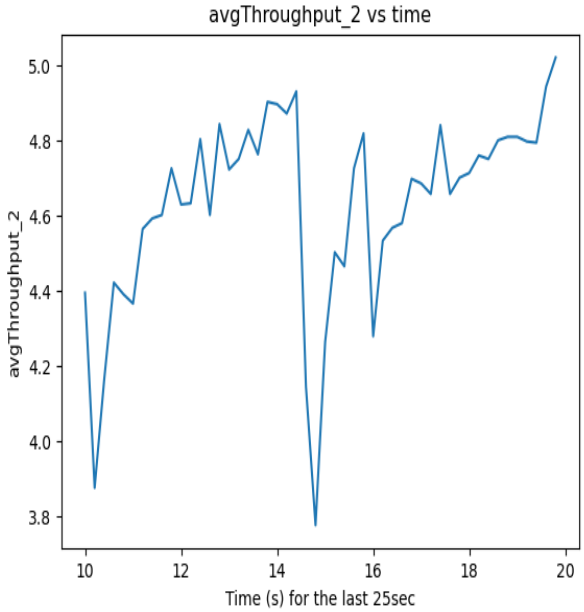

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
60
70
80
10
12
14
16
18
20

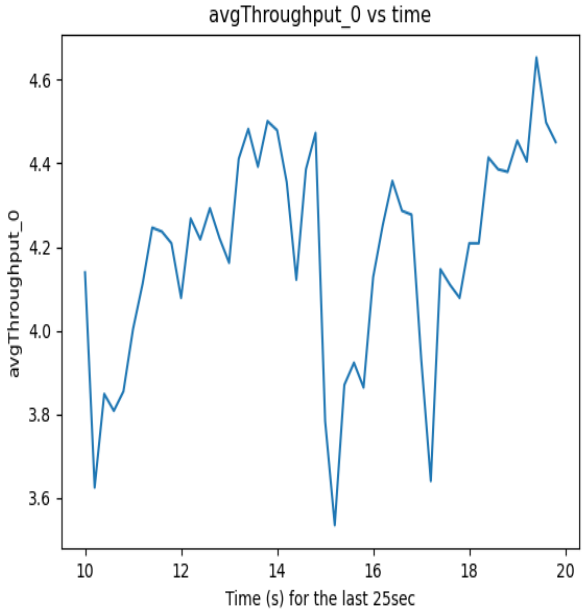

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

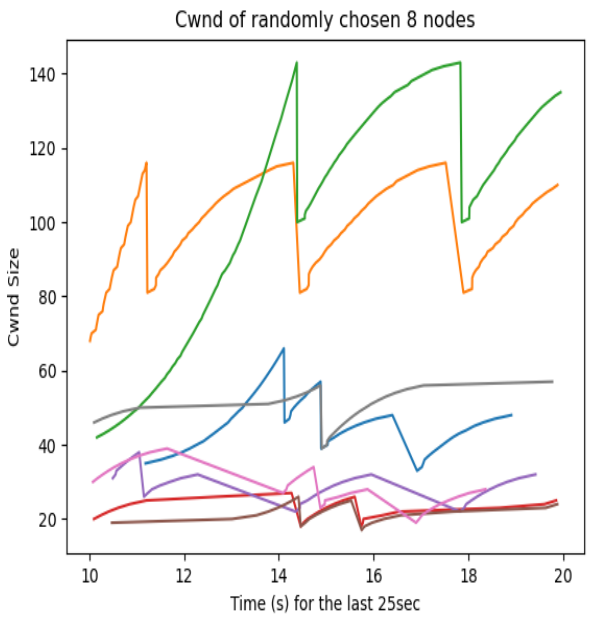
40-TcpNewReno-200

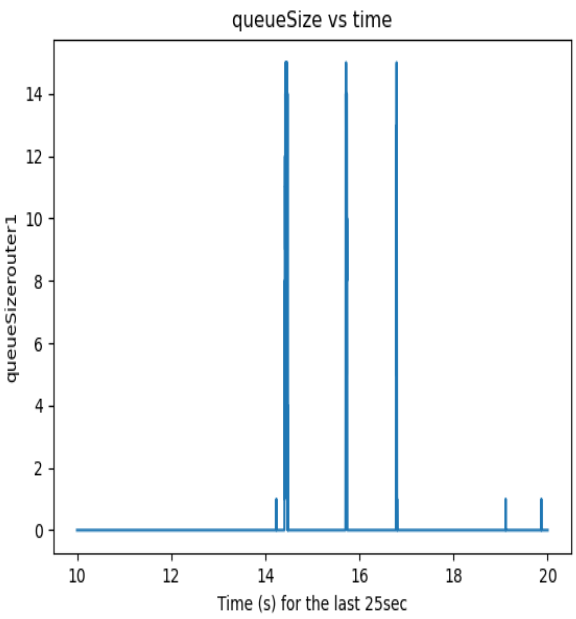




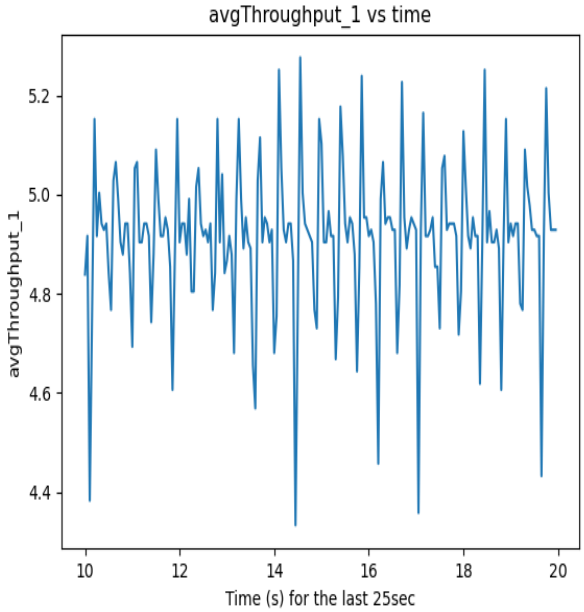


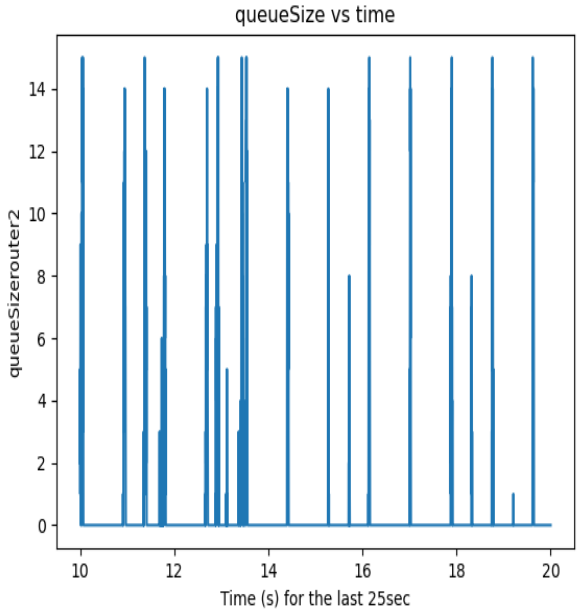


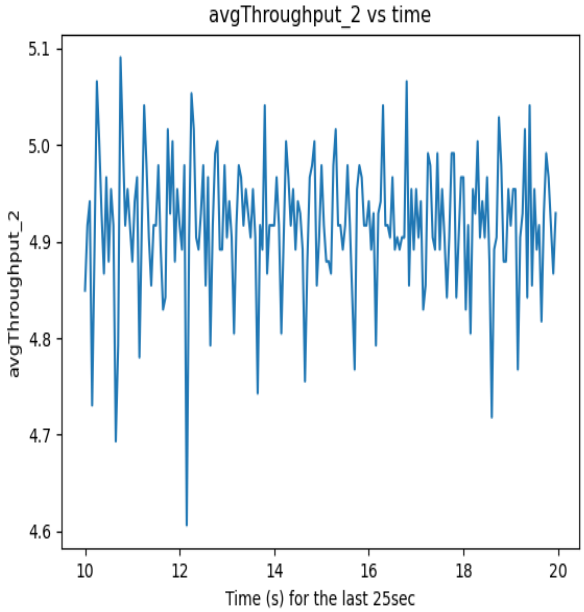

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

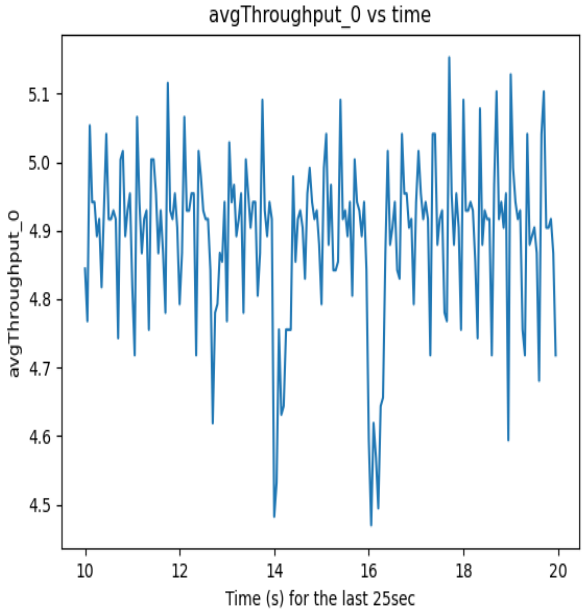

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

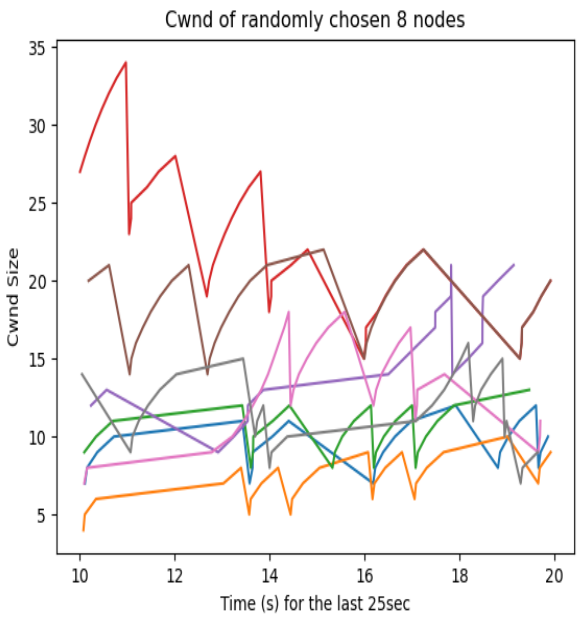
40-TcpNewReno-50

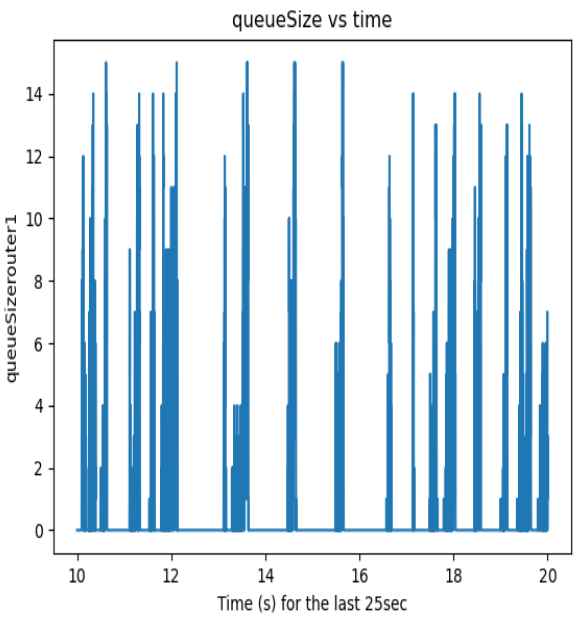




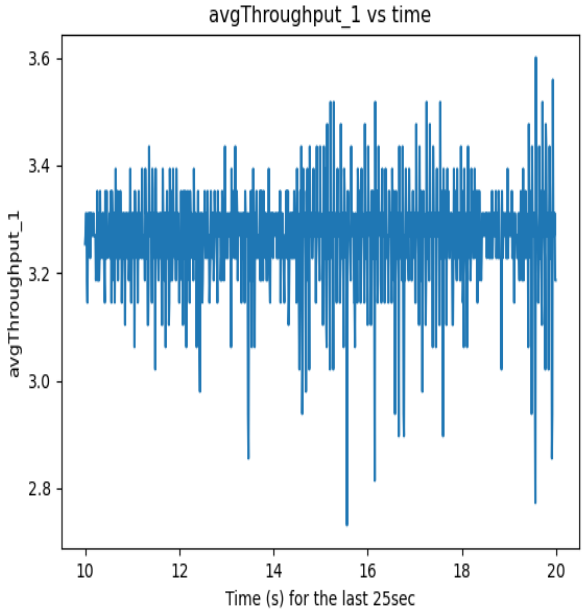


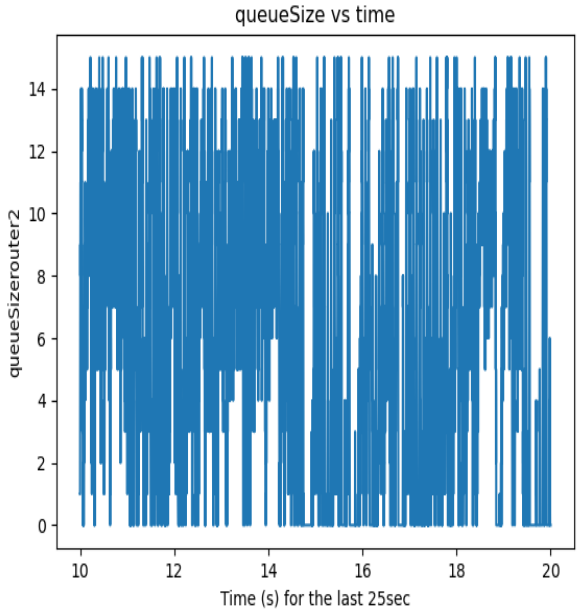


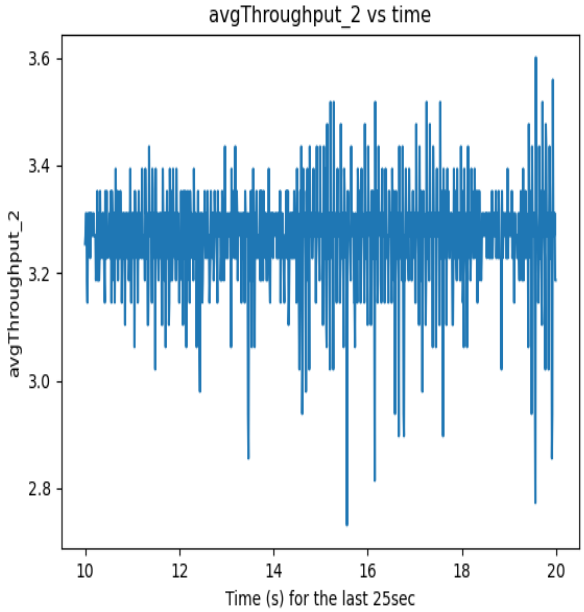

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

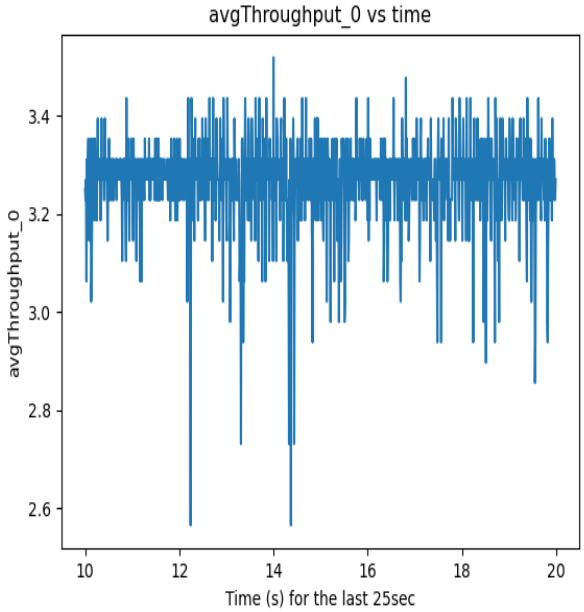

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

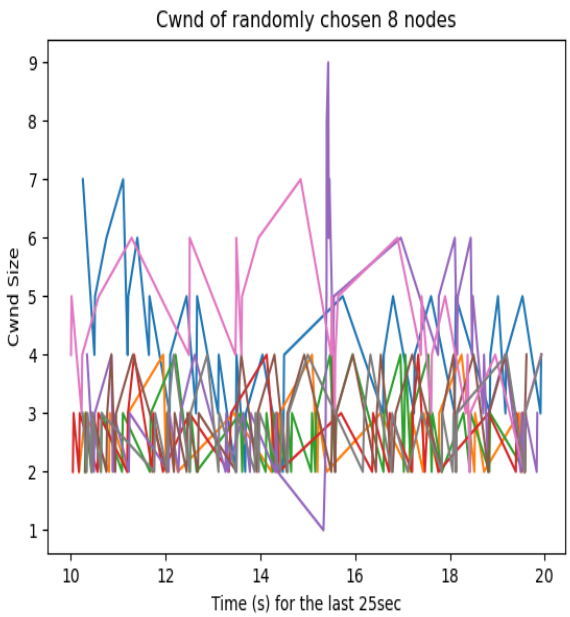
60-TcpBbr-10

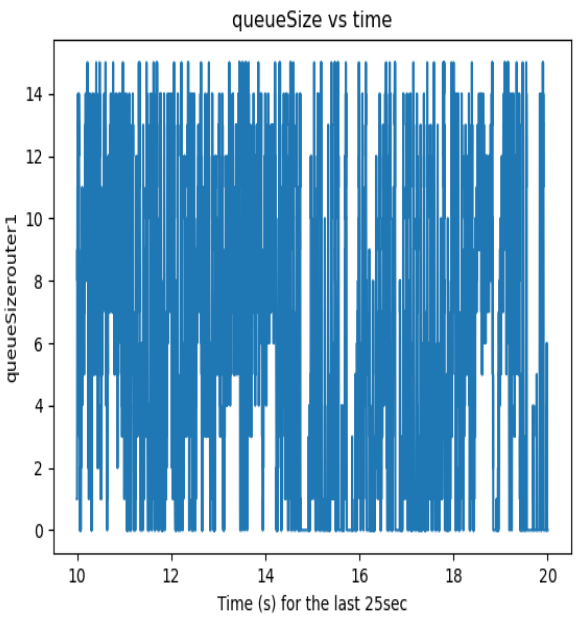

avgThroughput_1 vs time
avgThroughput_1
3.6
3.4
3.2
3.0
2.8
10
12
14
16
18
20
Time (s) for the last 25sec


queueSize vs time
queueSizerouter2
14
12
10
8
6
4
2
0
10
12
14
16
18
20
Time (s) for the last 25sec

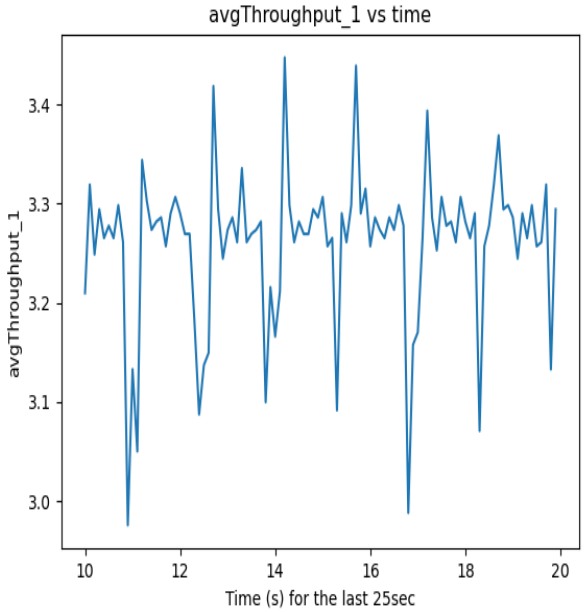

avgThroughput_2 vs time
avgThroughput_2
3.6
3.4
3.2
3.0
2.8
10
12
14
16
18
20
Time (s) for the last 25sec

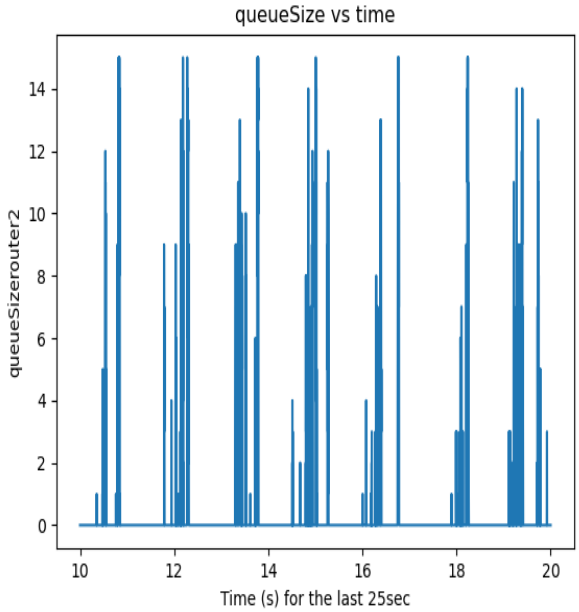

avgThroughput_0 vs time
avgThroughput_0
3.4
3.2
3.0
2.8
2.6
10
12
14
16
18
20
Time (s) for the last 25sec

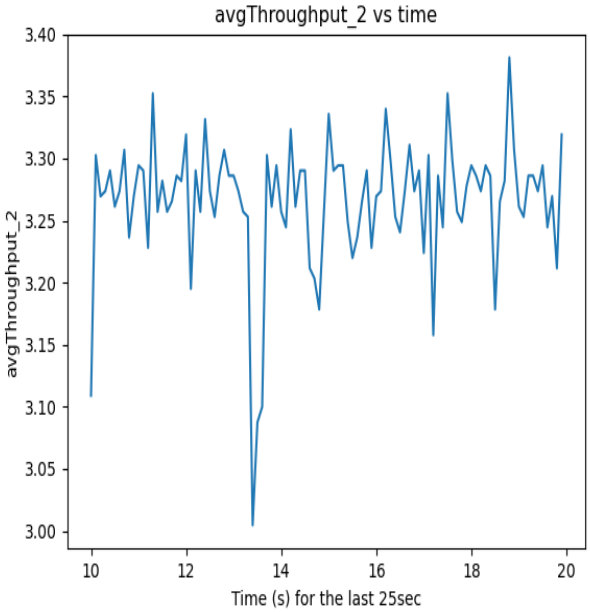

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

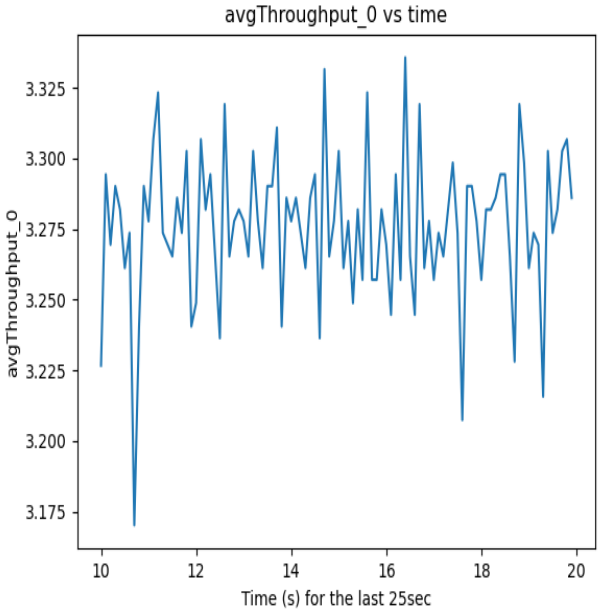

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

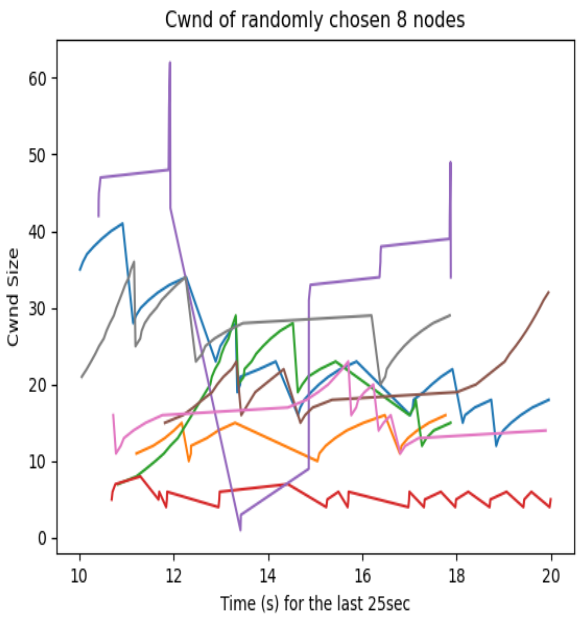
60-TcpBbr-100

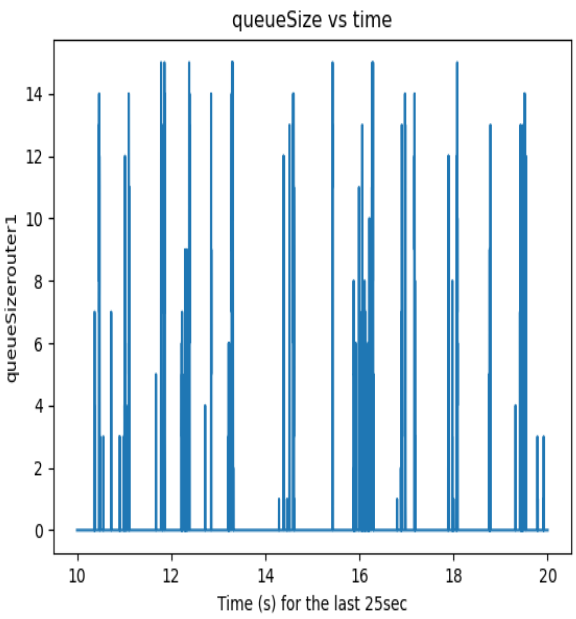




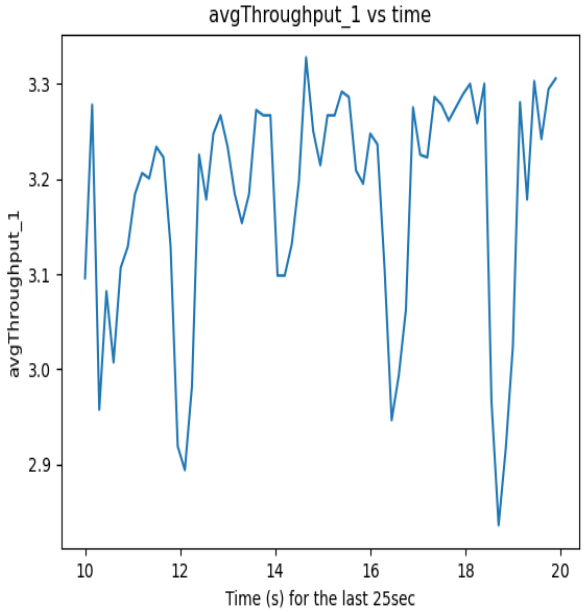


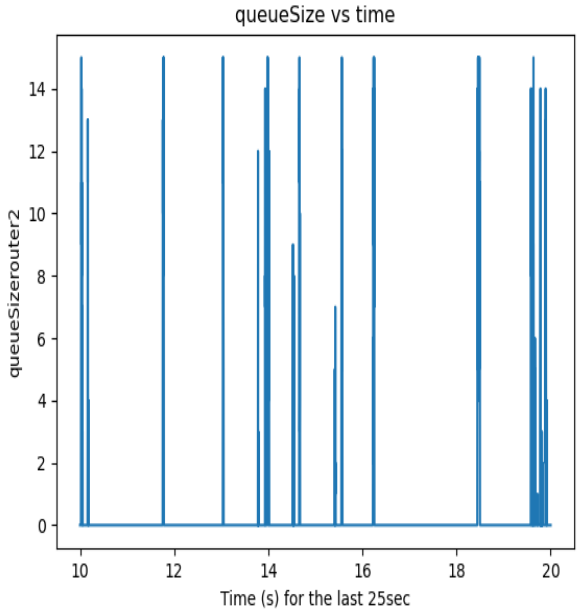


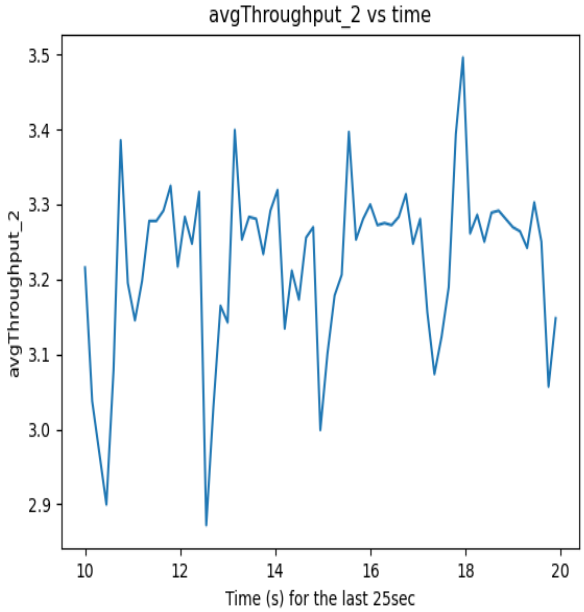

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
60
10
12
14
16
18
20

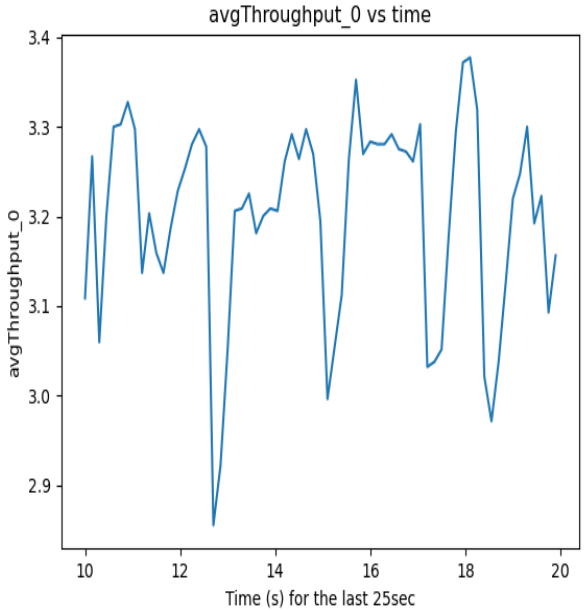

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

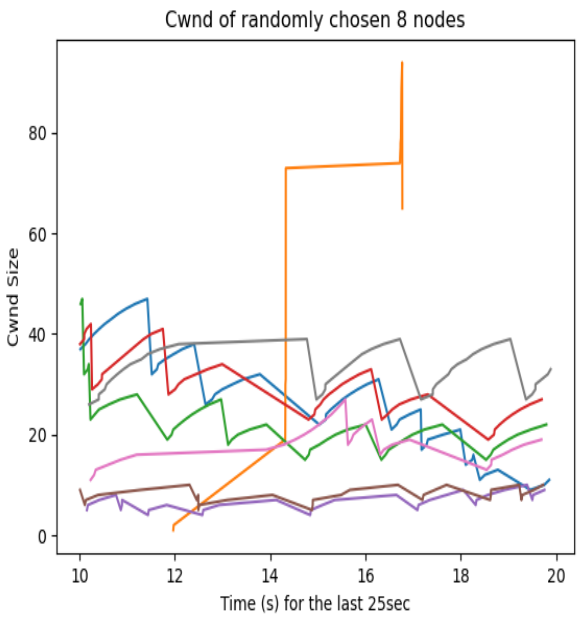
60-TcpBbr-150

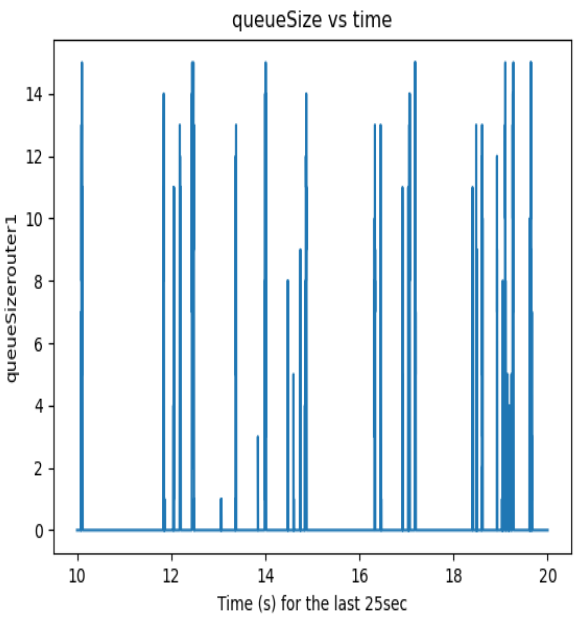




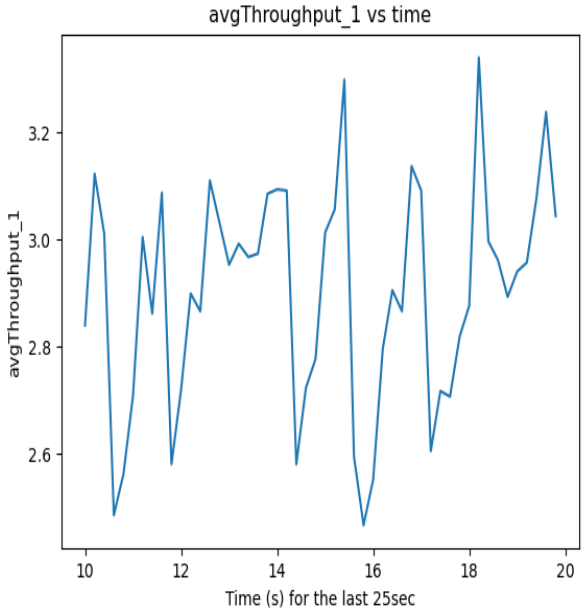


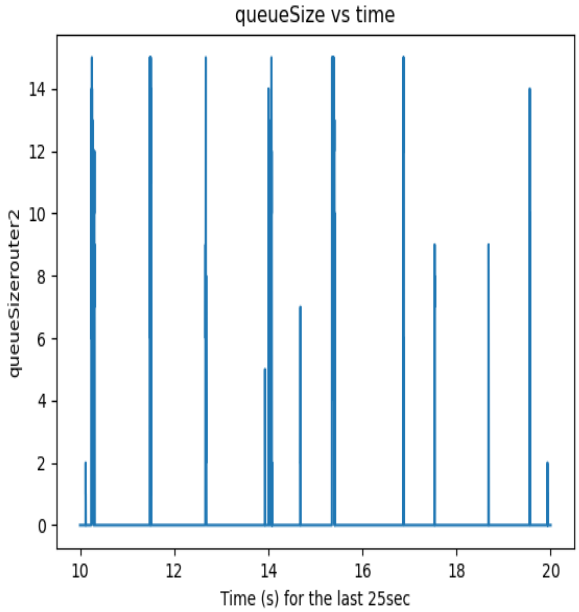


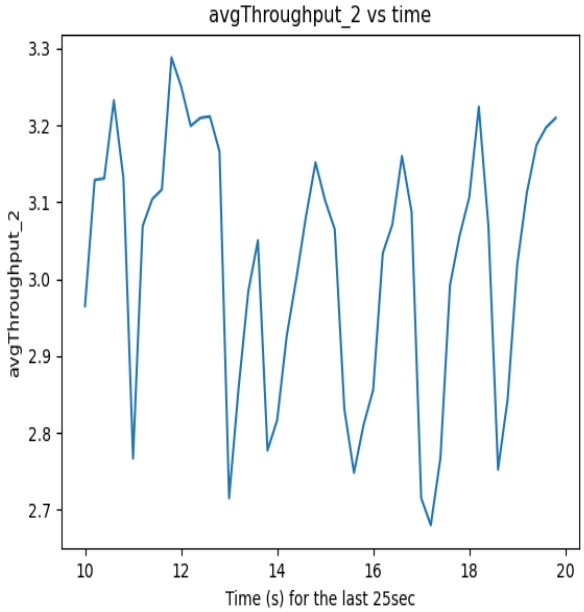

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
20
40
60
80
10
12
14
16
18
20

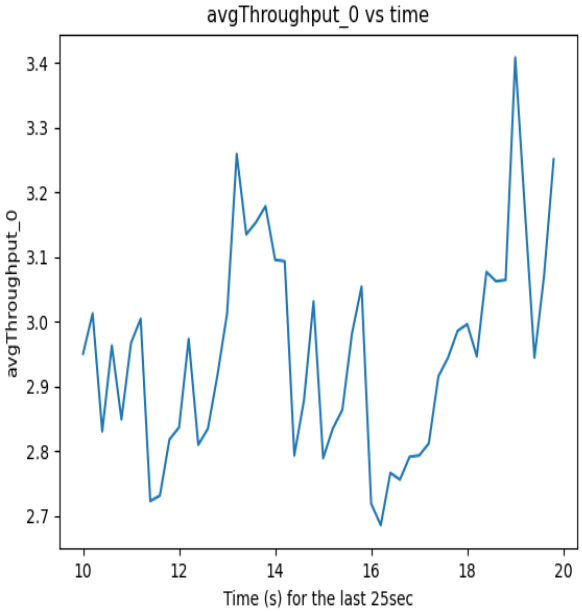

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

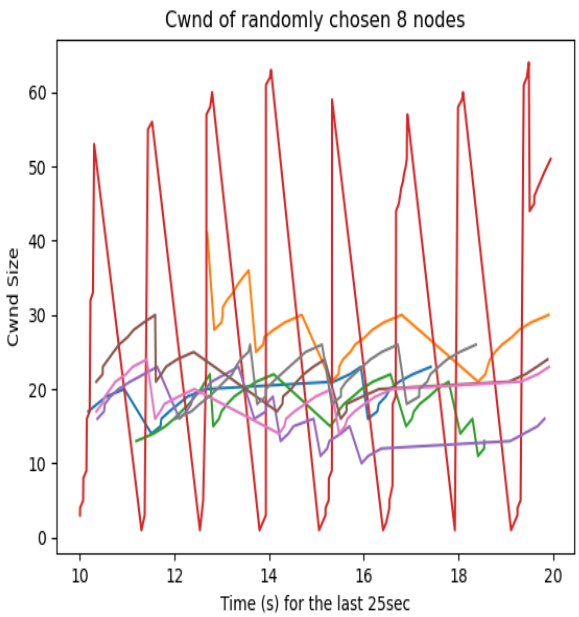
60-TcpBbr-200

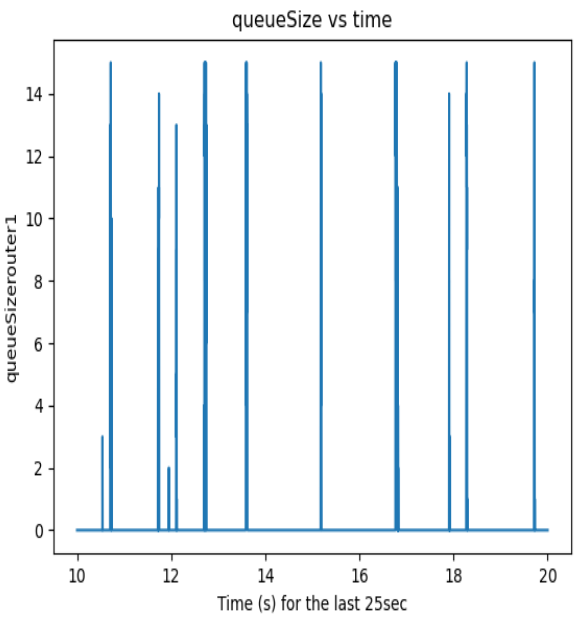




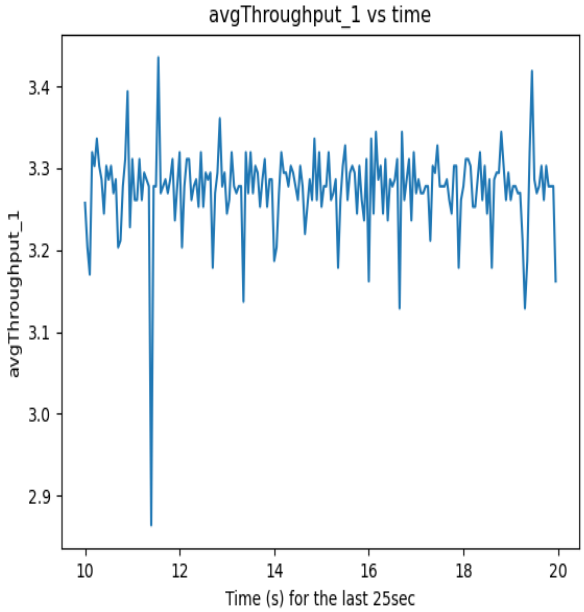


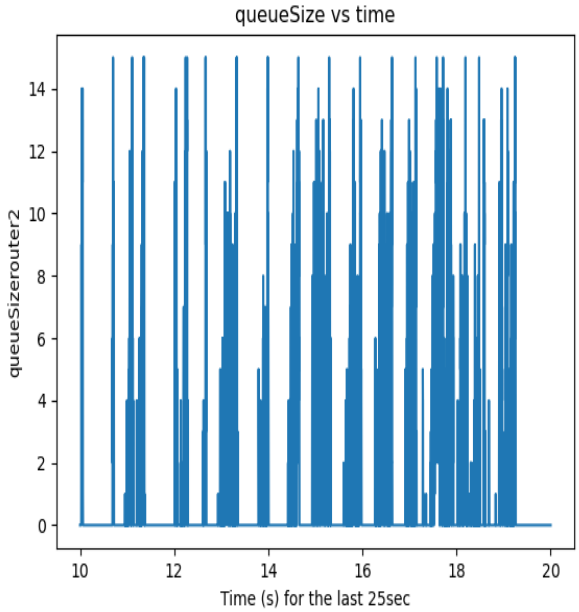


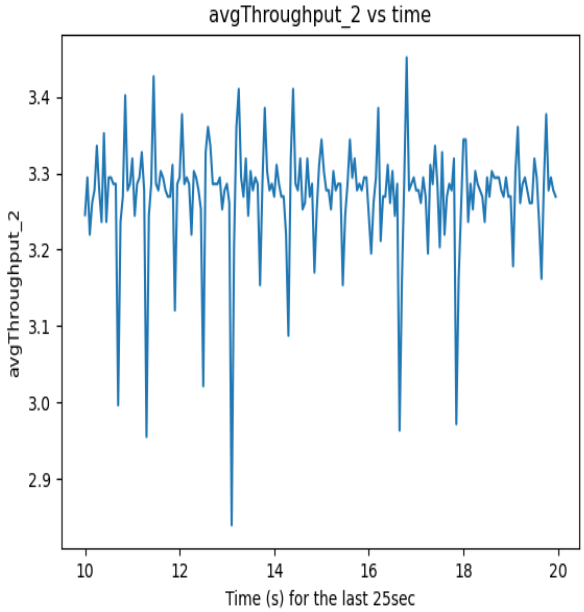

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
60
10
12
14
16
18
20

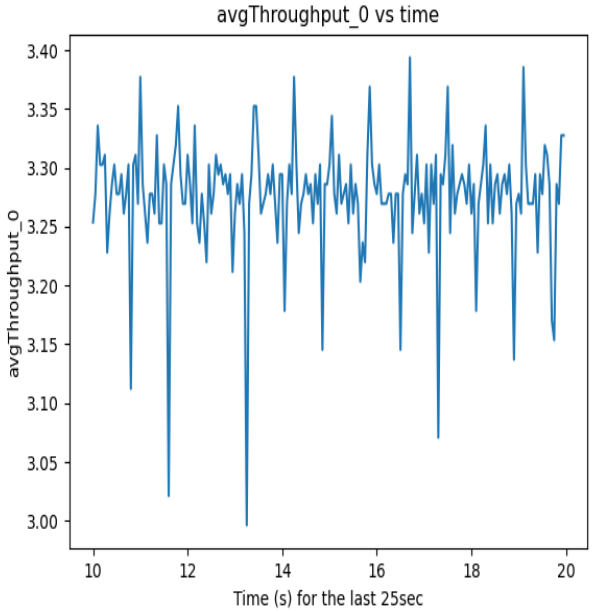

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

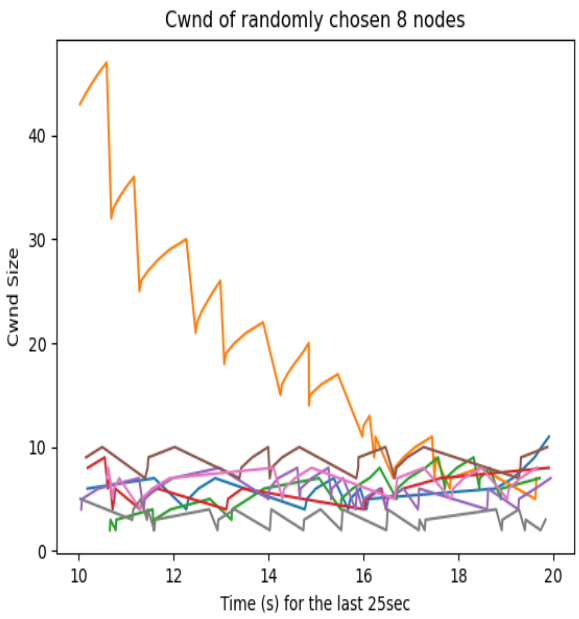
60-TcpBbr-50

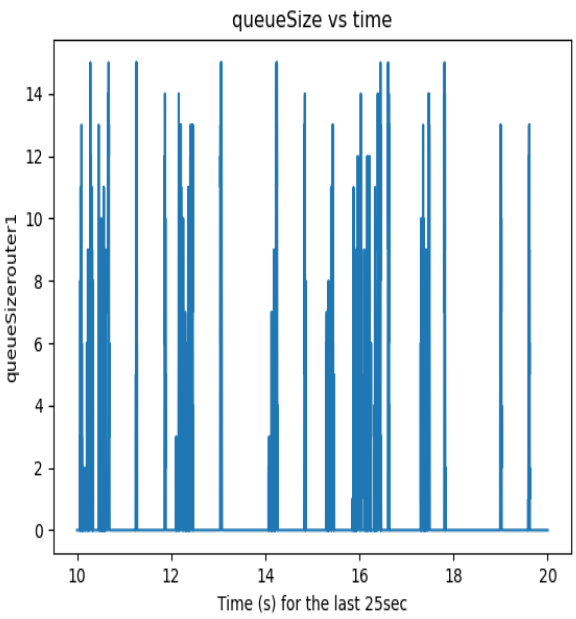

avgThroughput_1 vs time
avgThroughput_1
Time (s) for the last 25sec


queueSize vs time
queueSizerouter2
Time (s) for the last 25sec

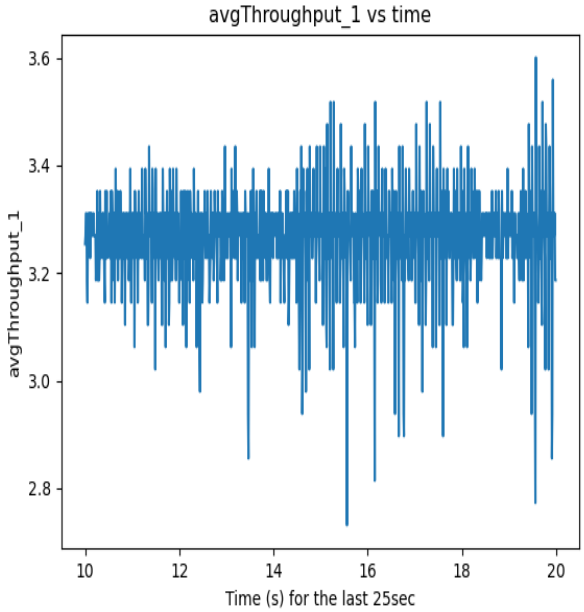

avgThroughput_2 vs time
avgThroughput_2
Time (s) for the last 25sec

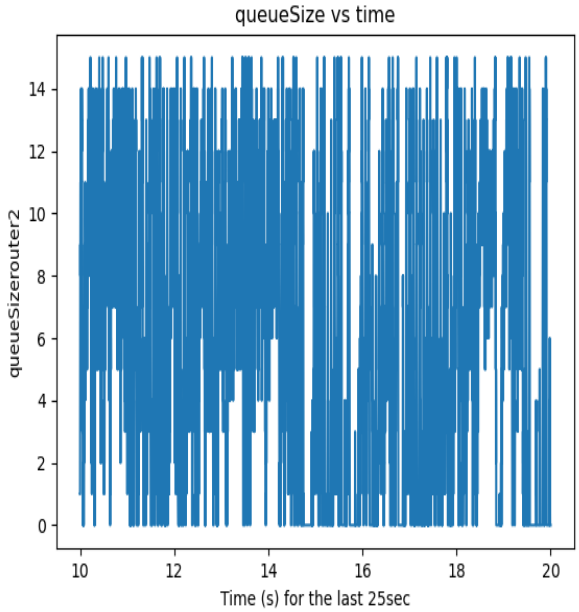

avgThroughput_0 vs time
avgThroughput_0
Time (s) for the last 25sec

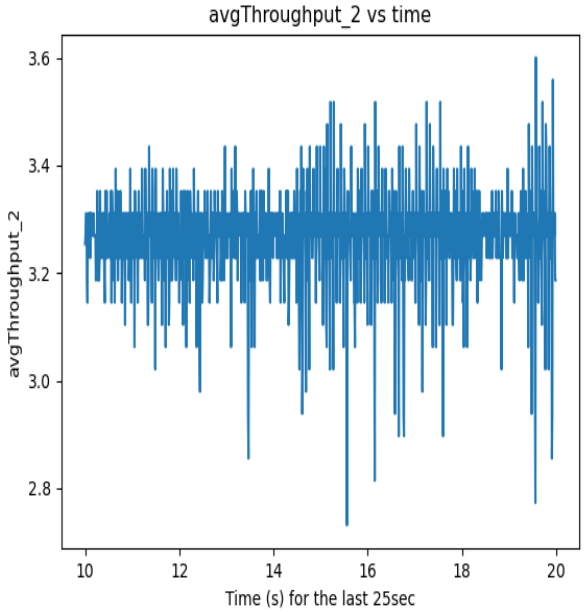

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
10
12
14
16
18
20

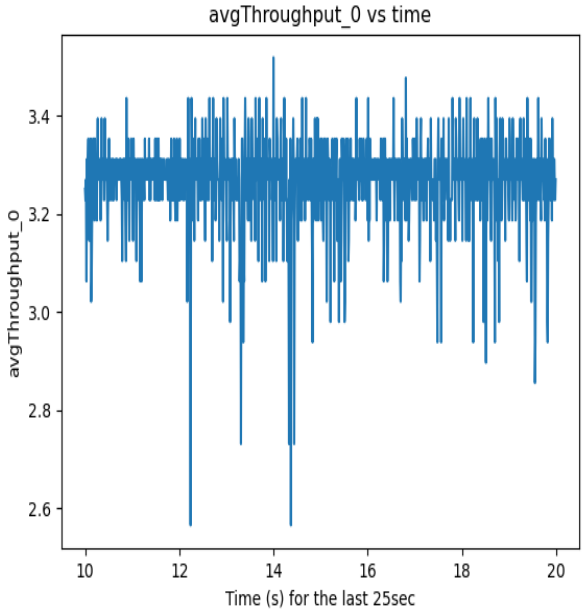

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

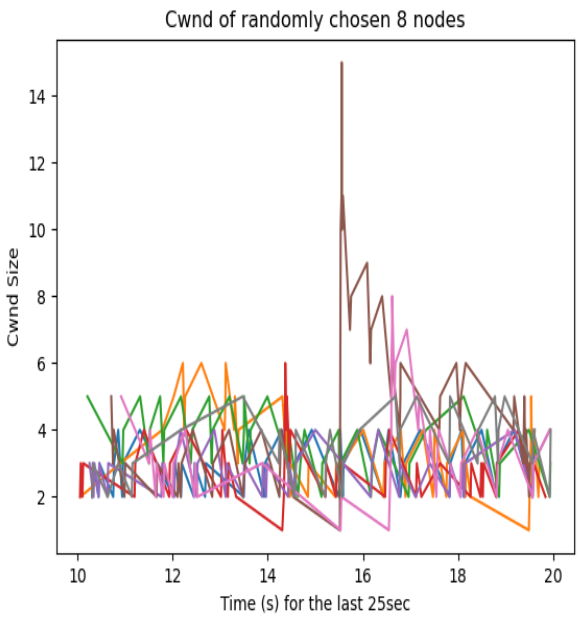
60-TcpCubic-10

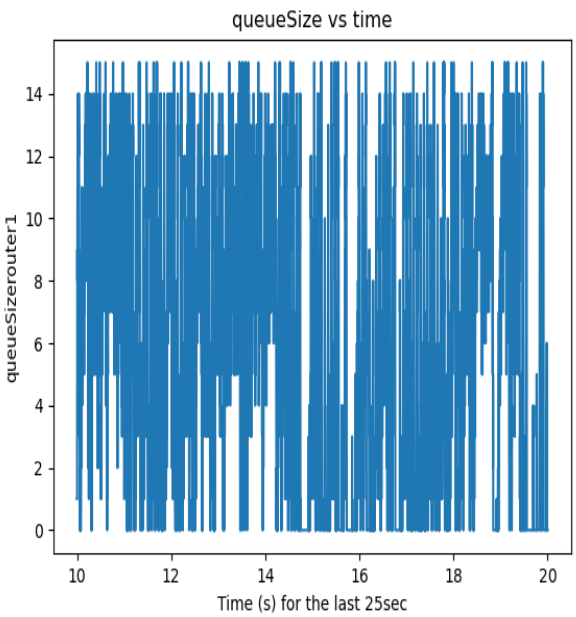




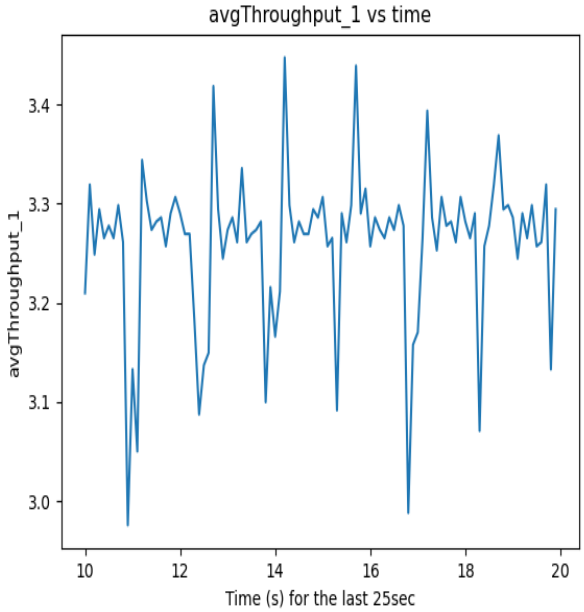


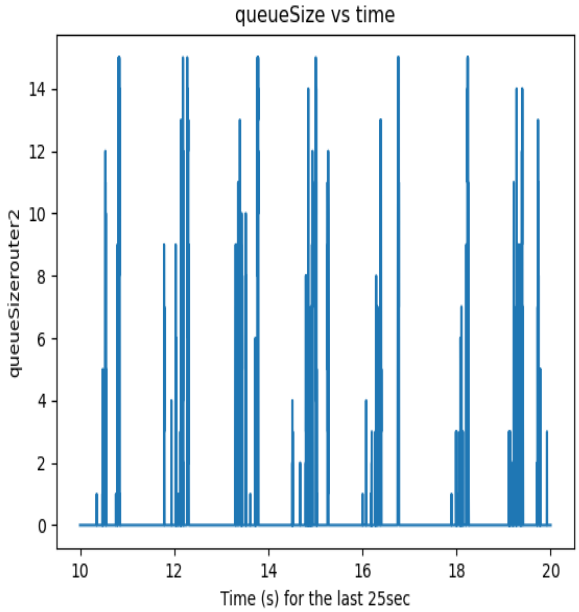


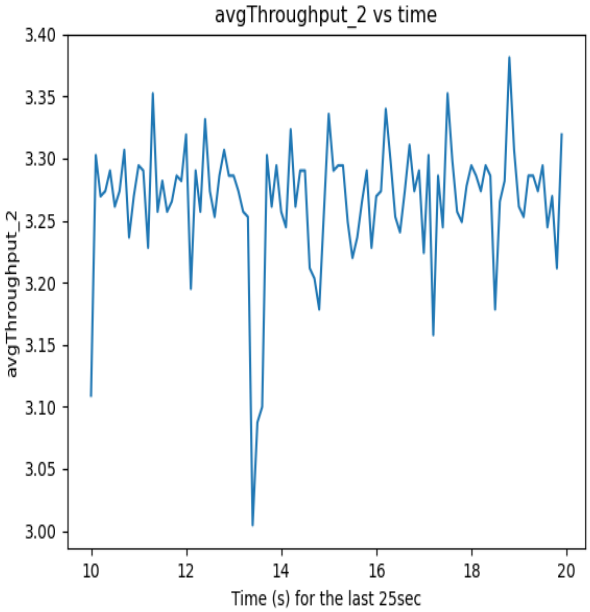

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

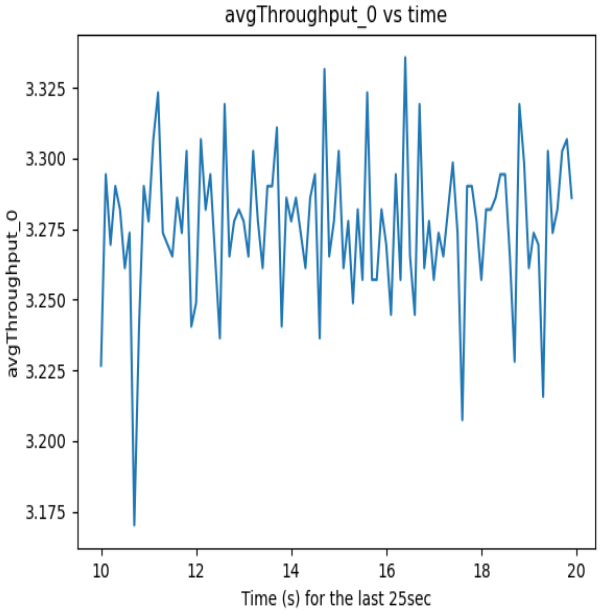

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

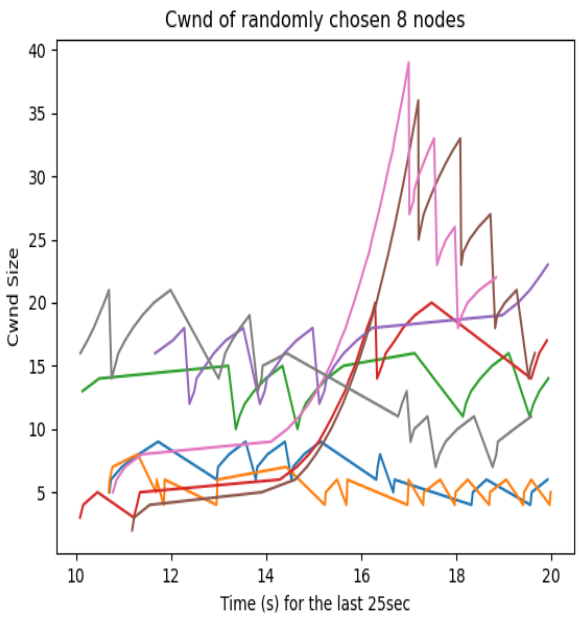
60-TcpCubic-100

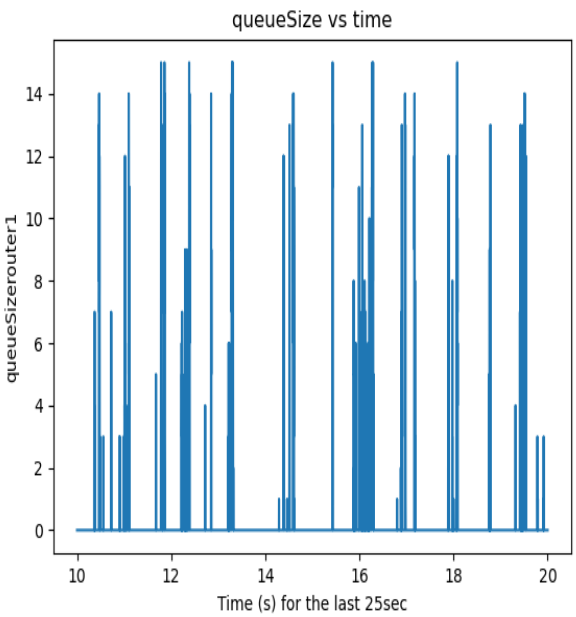




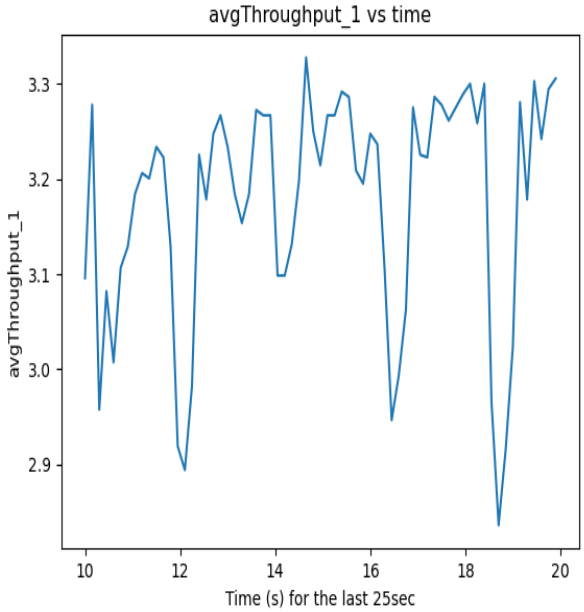


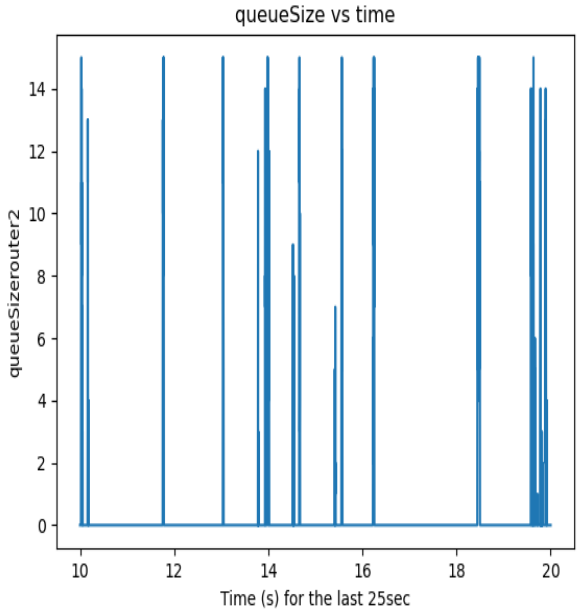


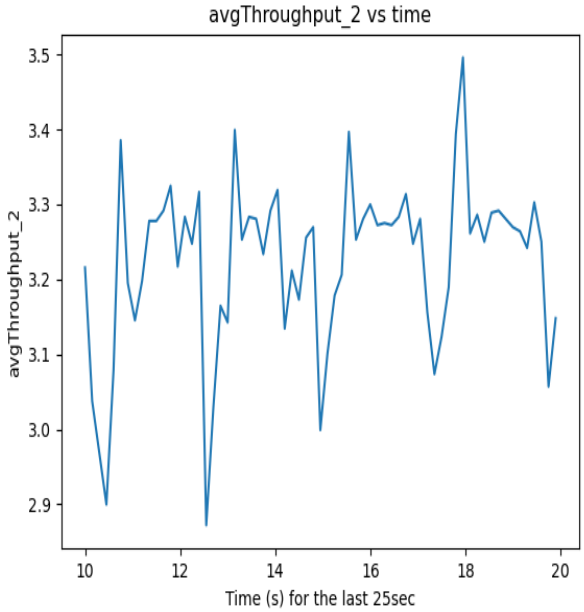

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
40
35
30
25
20
15
10
5
10
12
14
16
18
20

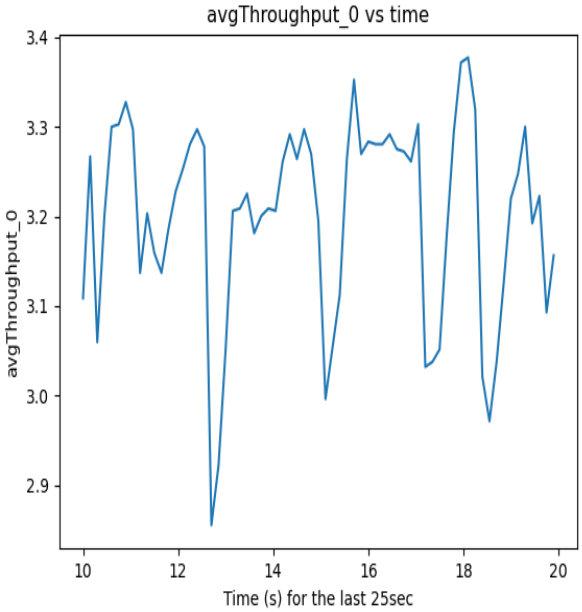

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

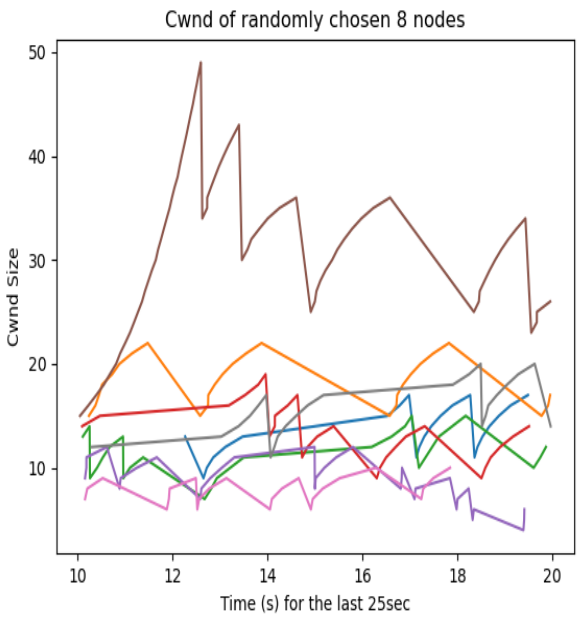
60-TcpCubic-150

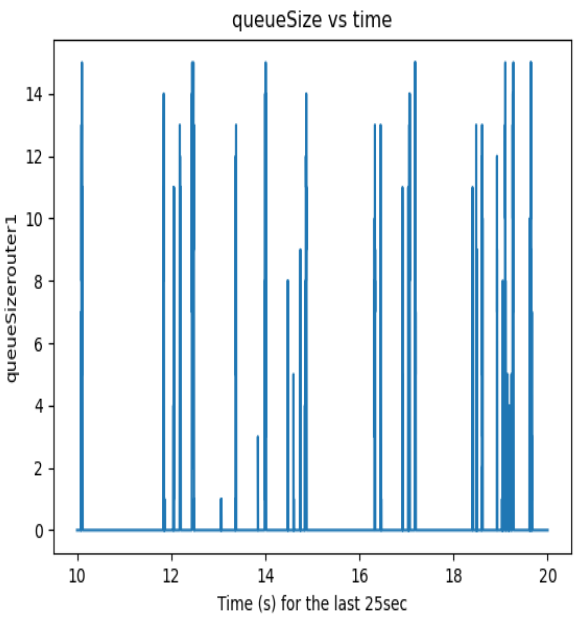




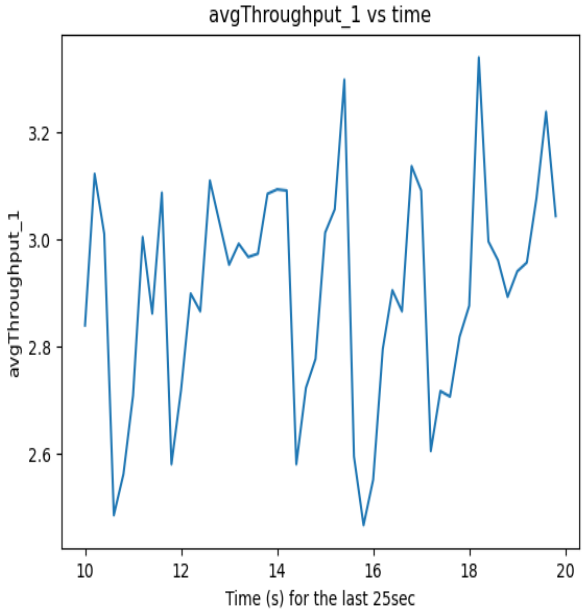


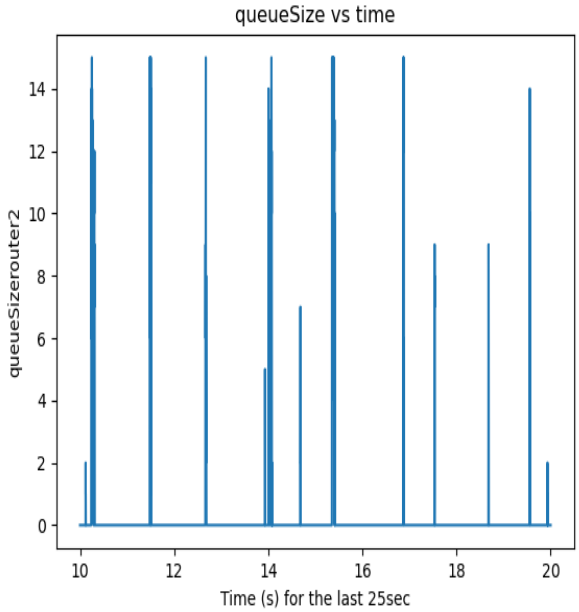


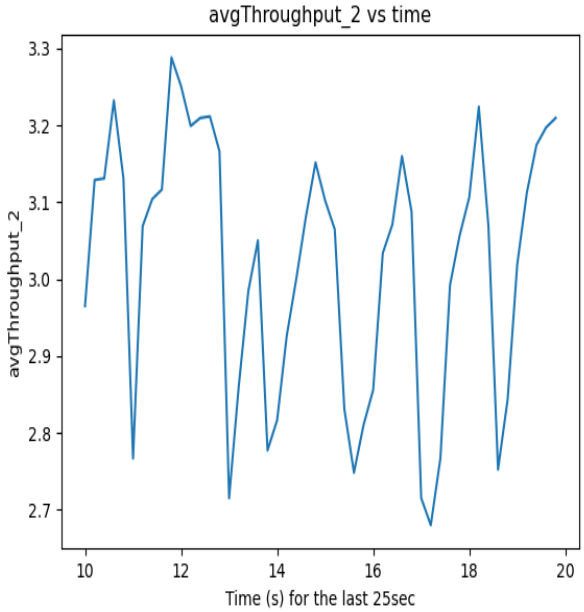

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
50
40
30
20
10
10
12
14
16
18
20

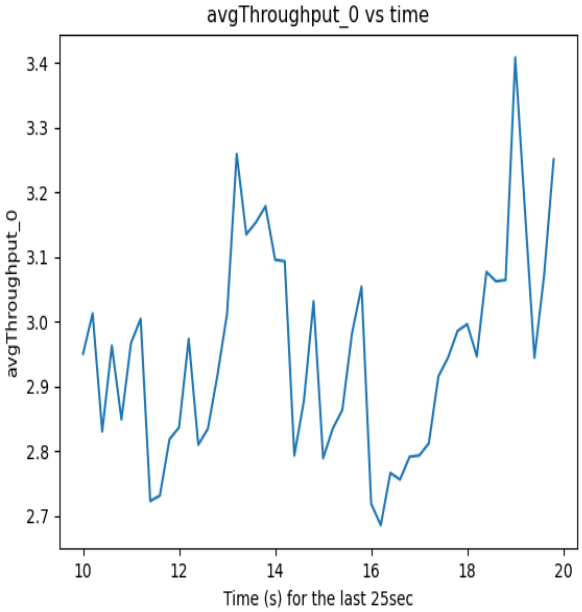

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

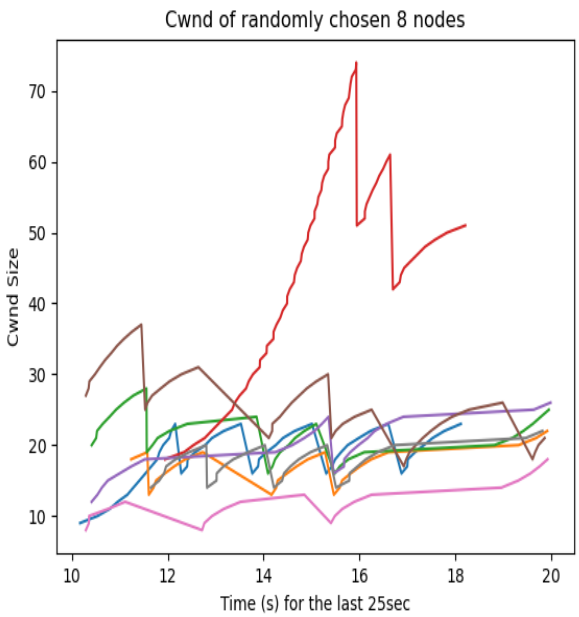
60-TcpCubic-200

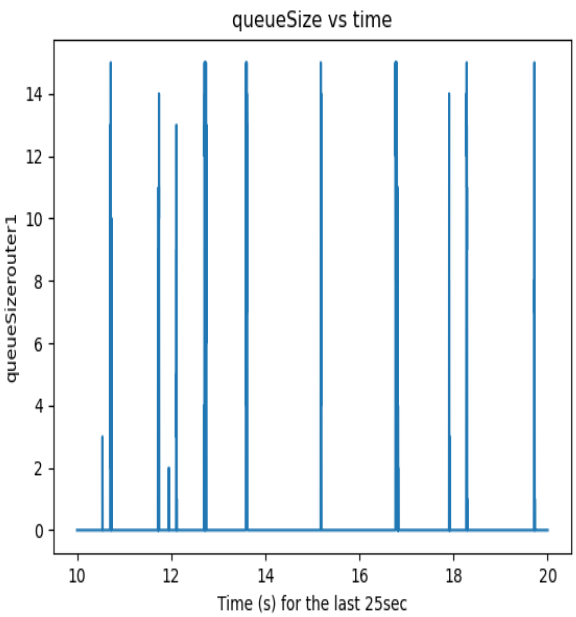




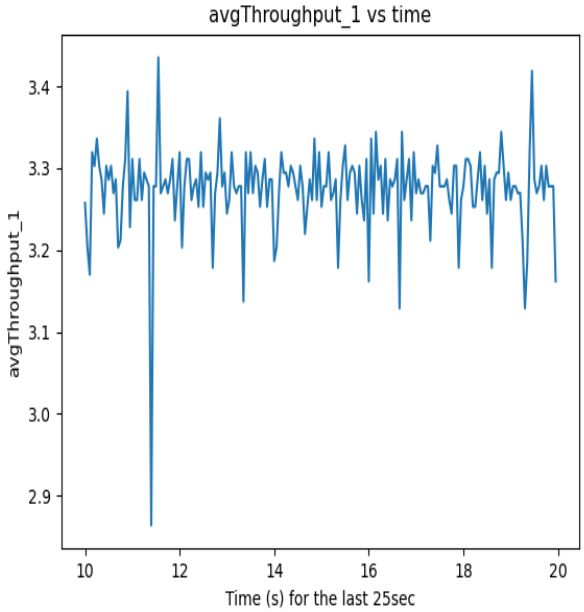


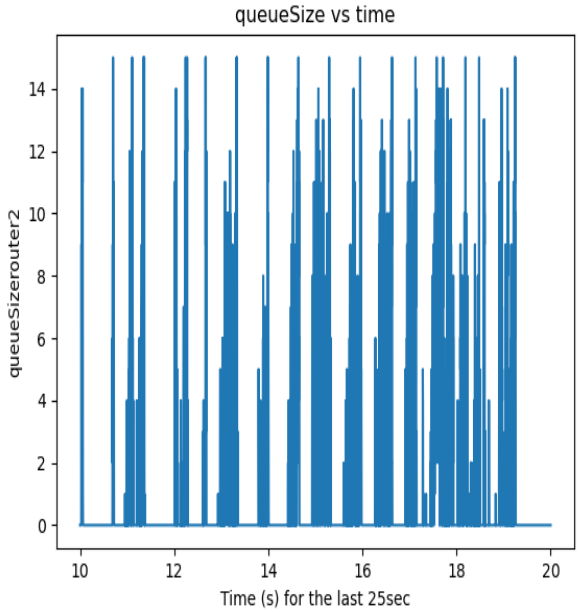


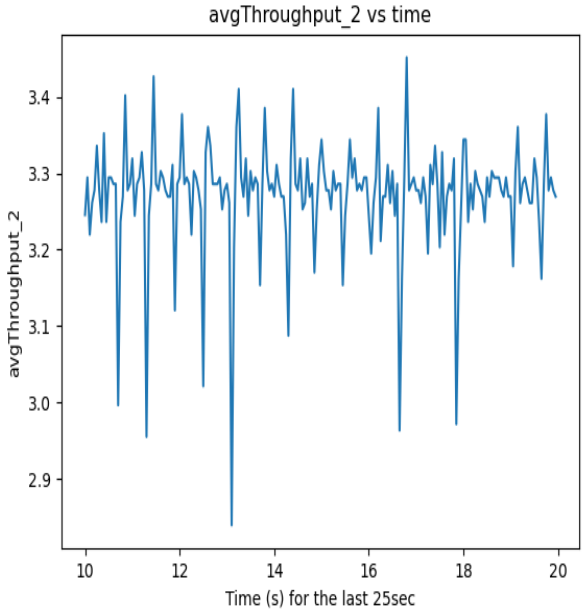

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
10
20
30
40
50
60
70
10
12
14
16
18
20

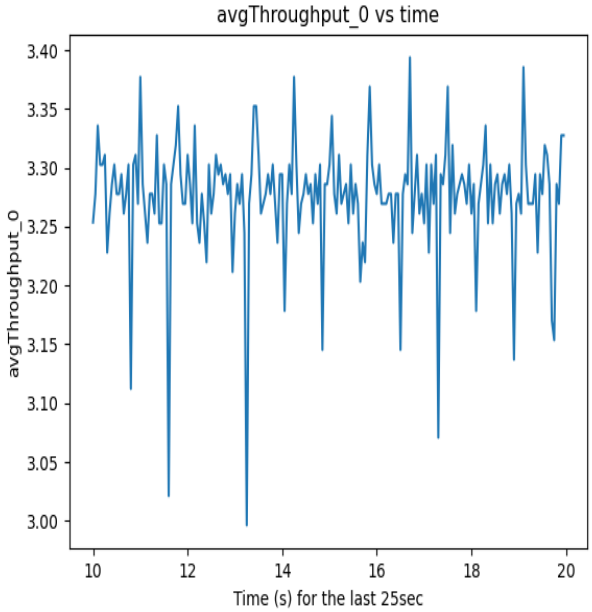

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

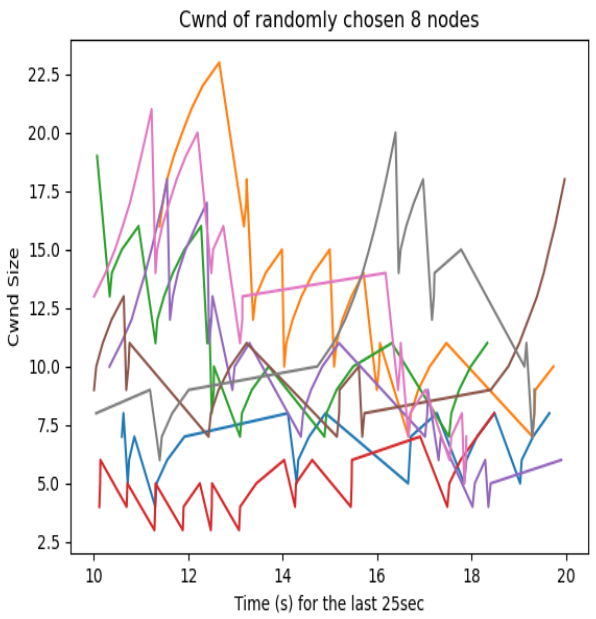
60-TcpCubic-50

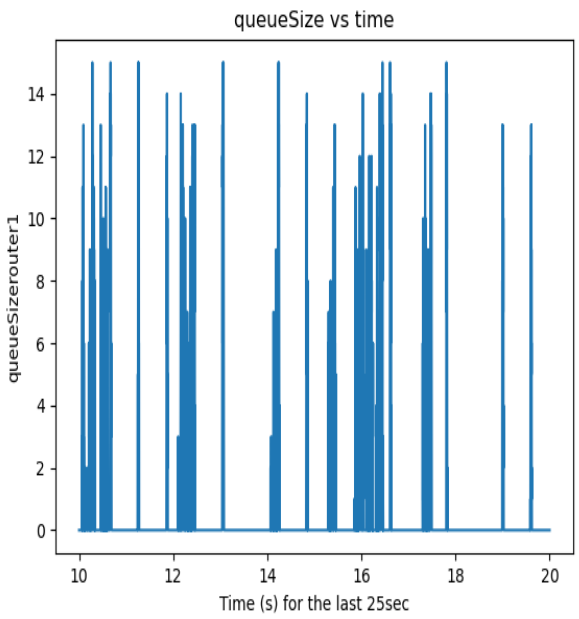




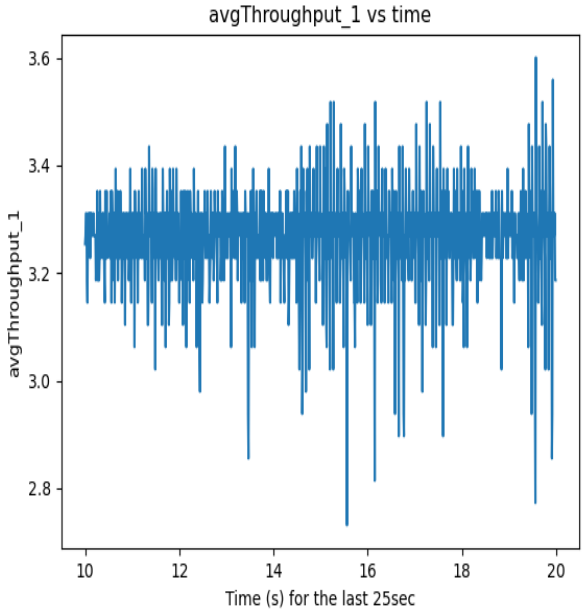


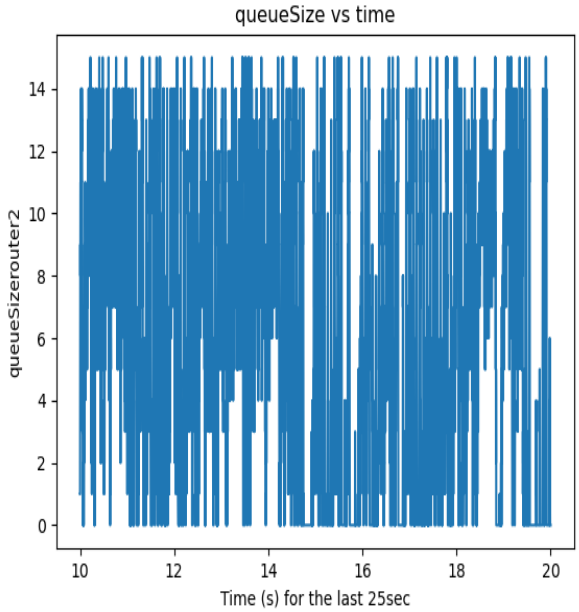


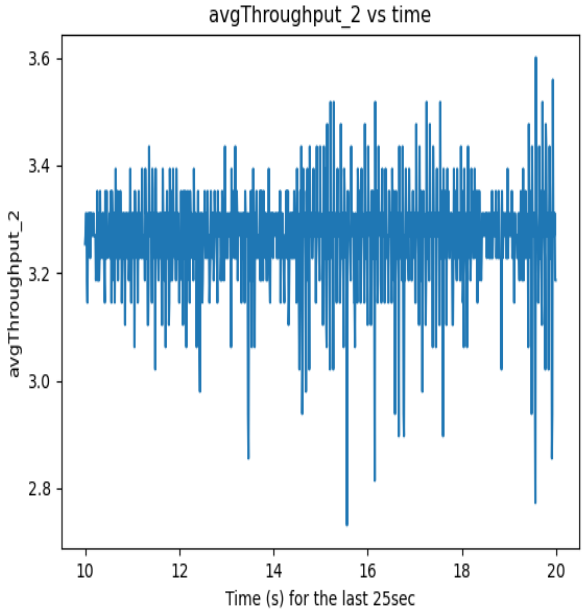

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

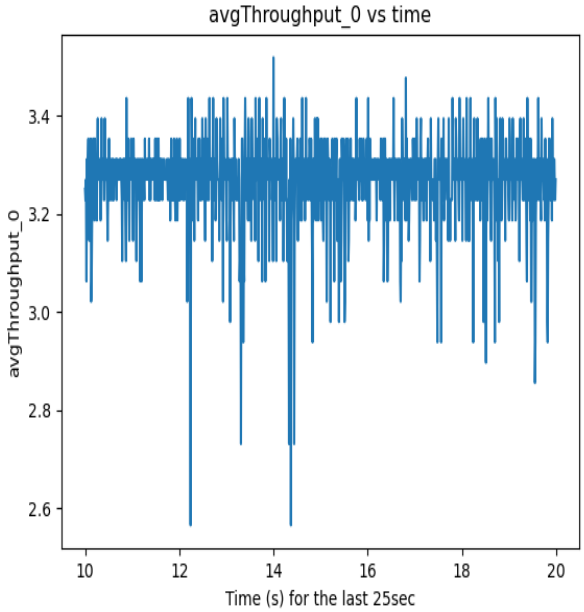

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

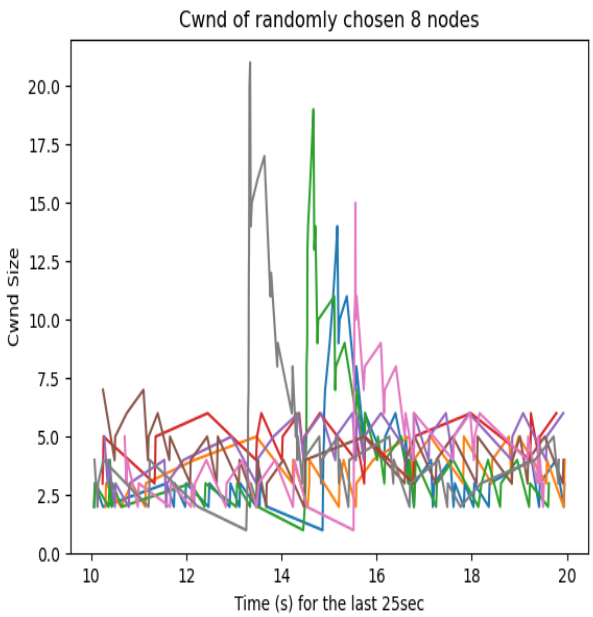
60-TcpNewReno-10

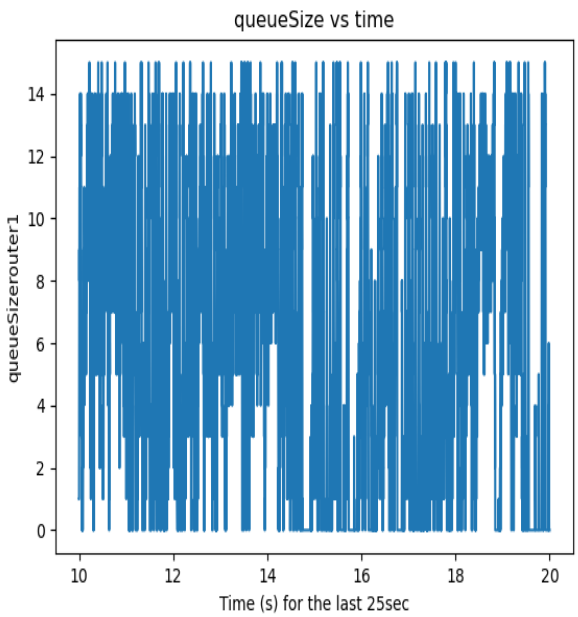




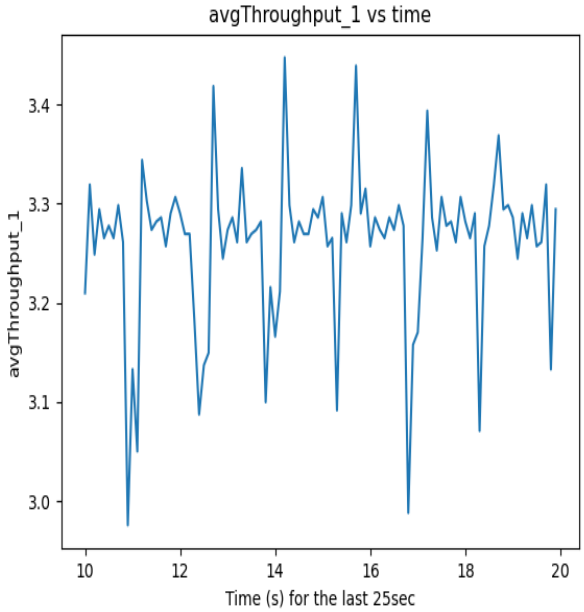


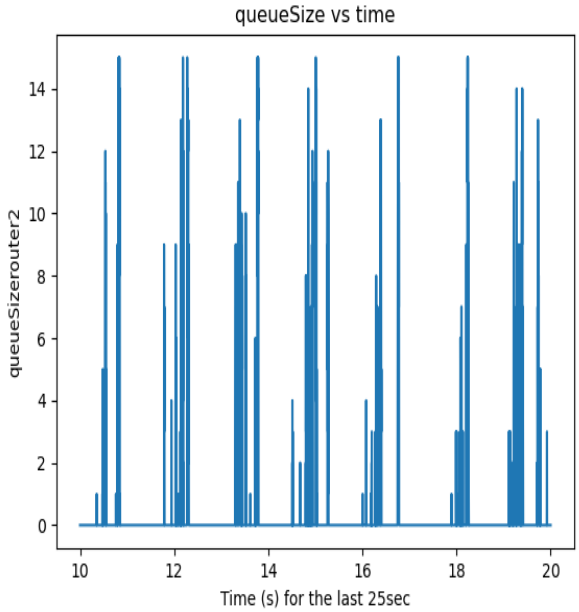


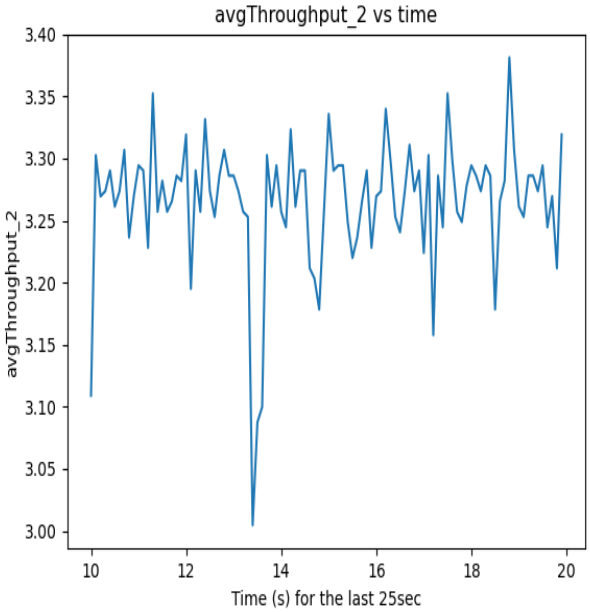

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10
12
14
16
18
20

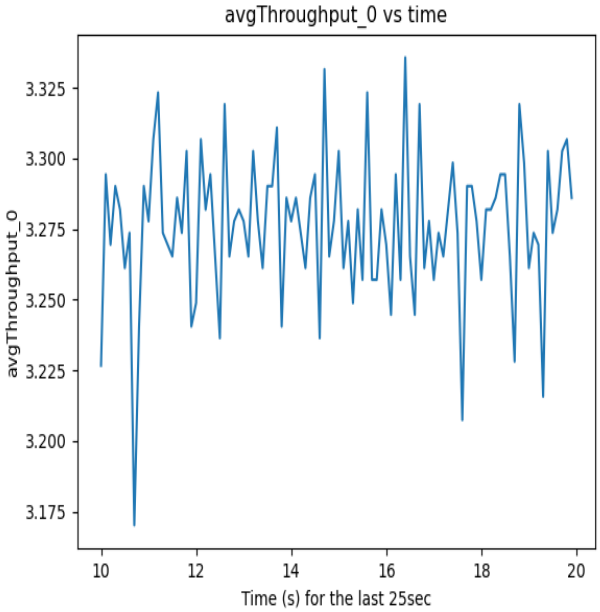

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

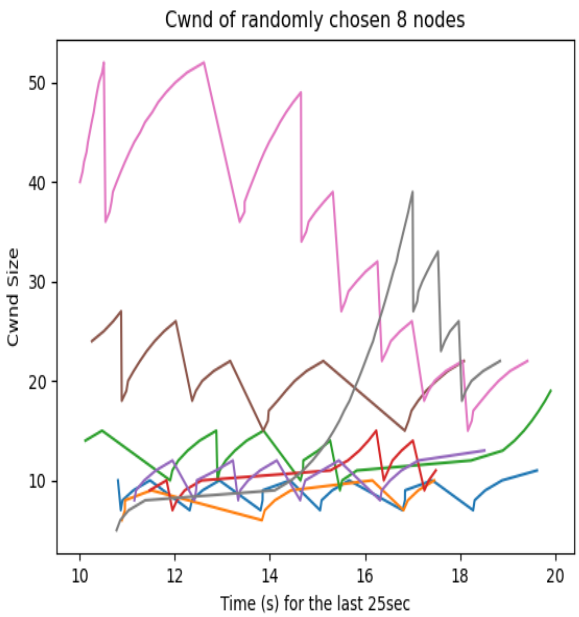
60-TcpNewReno-100

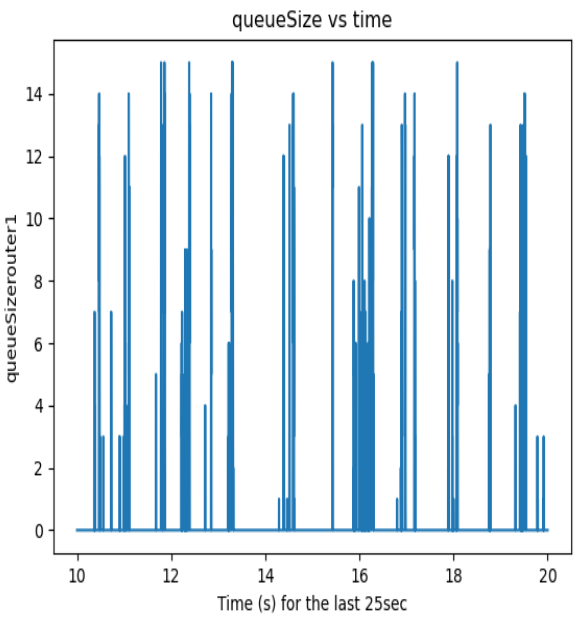




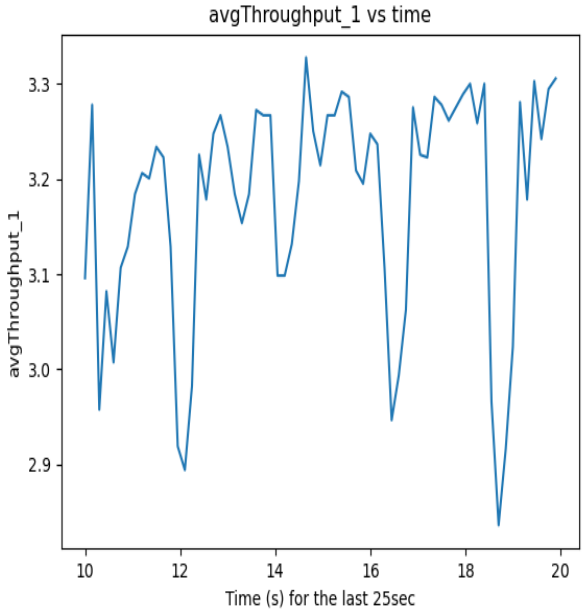


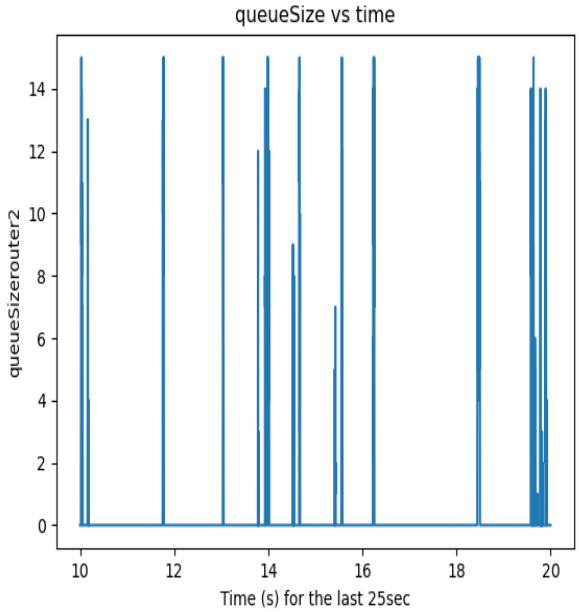


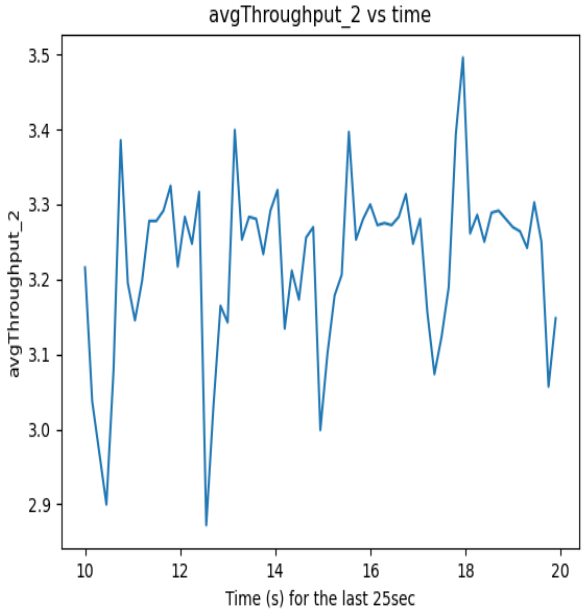

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
10
12
14
16
18
20
10
20
30
40
50

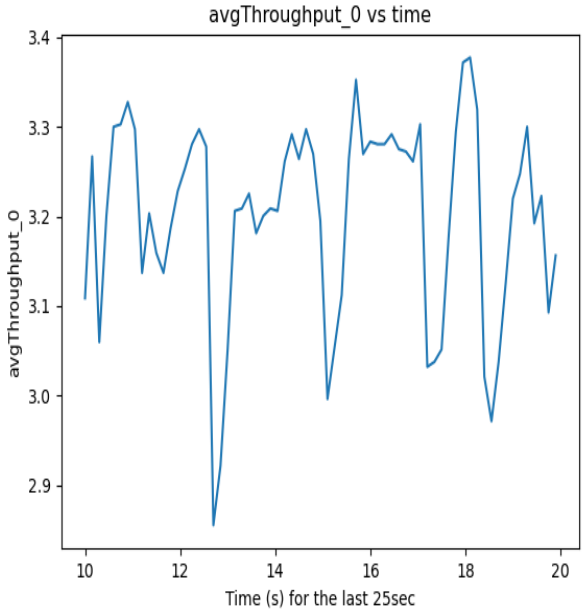

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
10
12
14
16
18
20
0
2
4
6
8
10
12
14

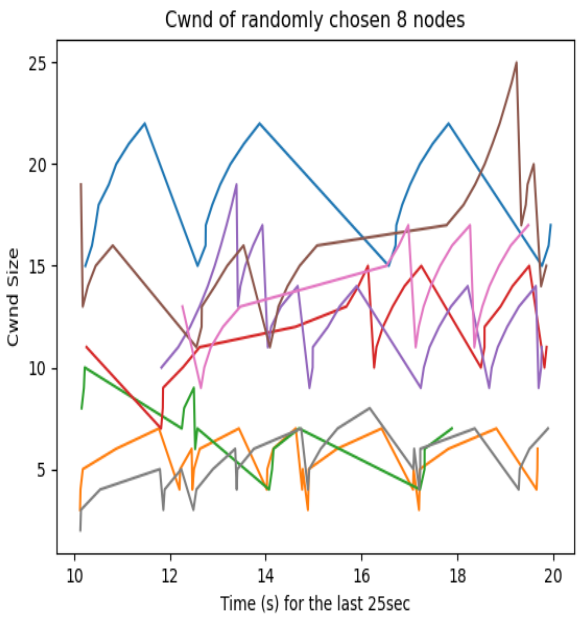
60-TcpNewReno-150

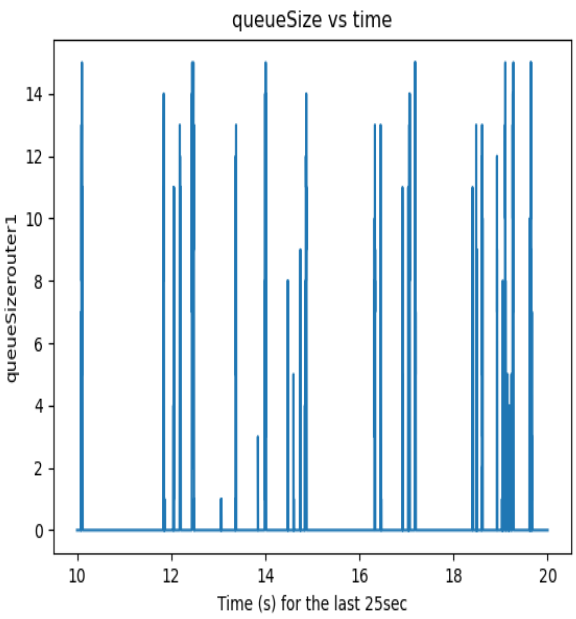




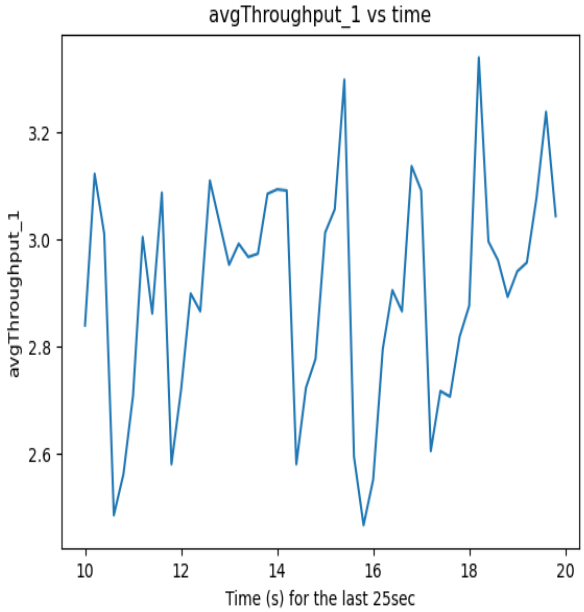


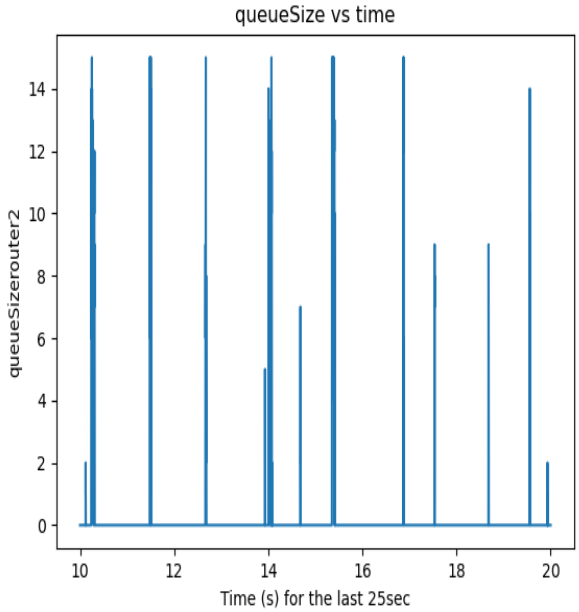


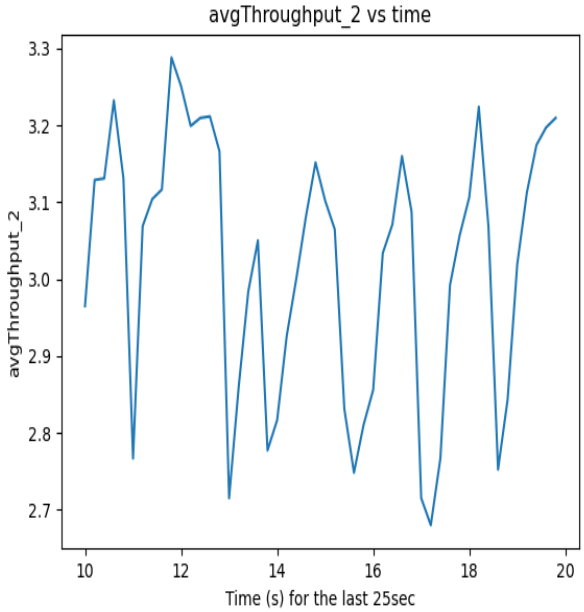

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
25
20
15
10
5
10
12
14
16
18
20

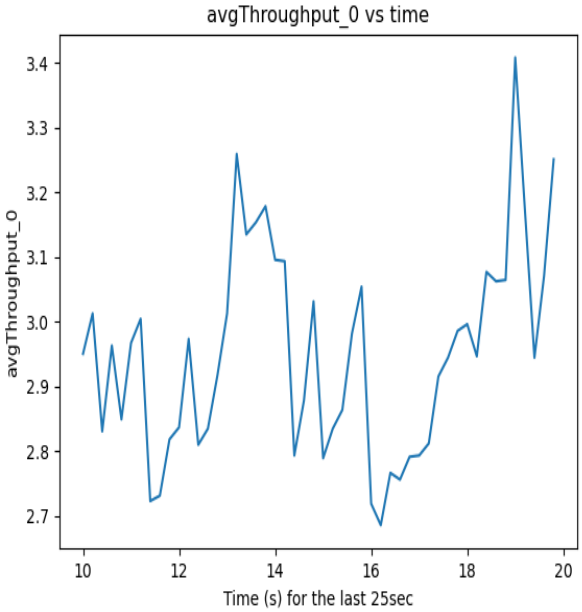

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

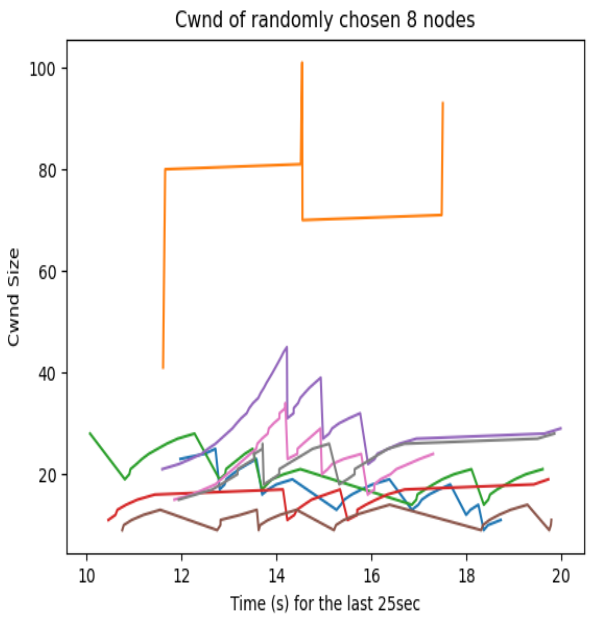
60-TcpNewReno-200

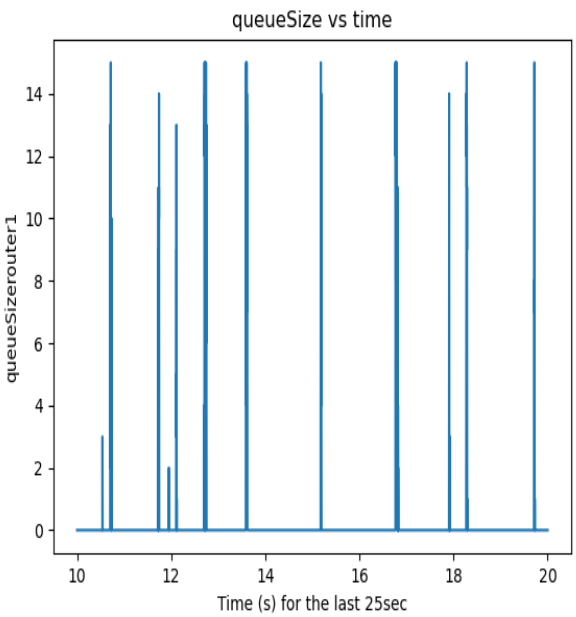




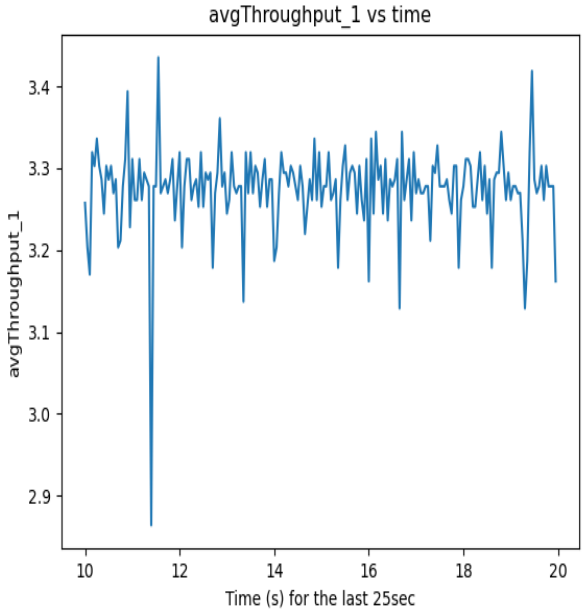


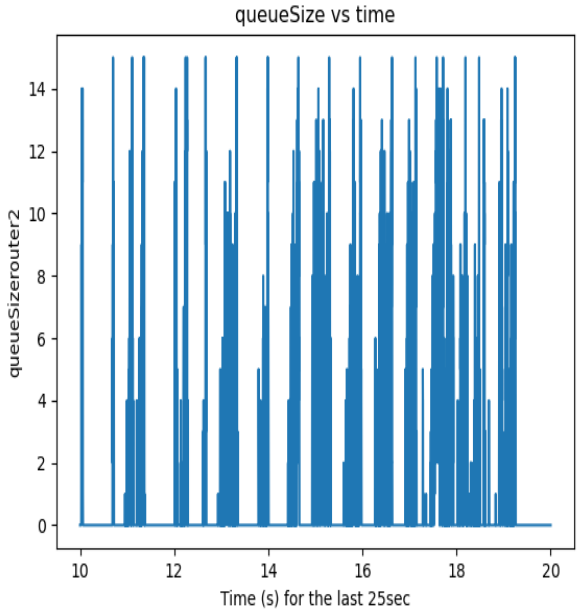


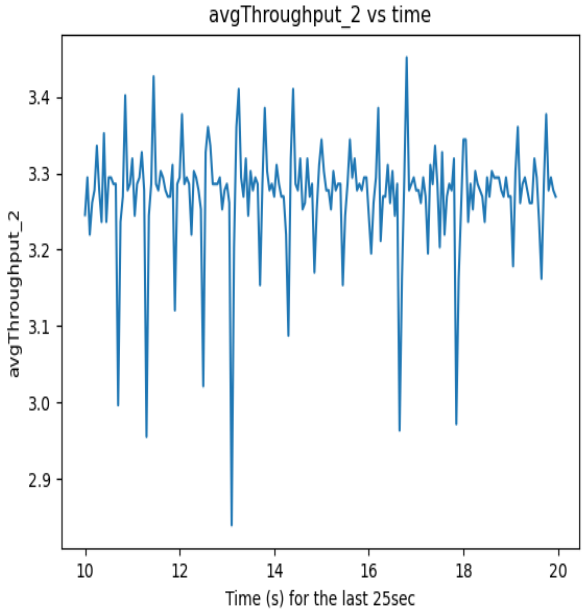

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
100
80
60
40
20
10
12
14
16
18
20

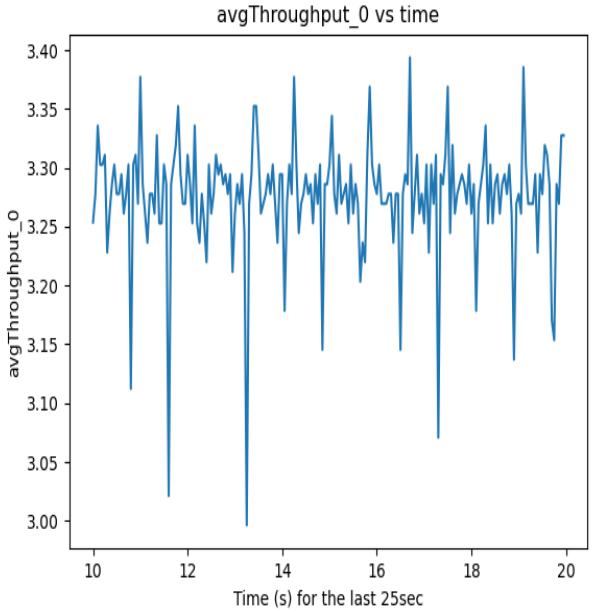

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

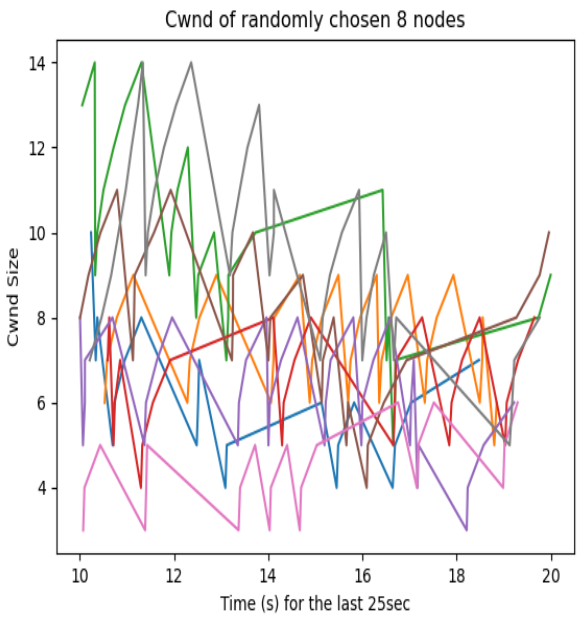
60-TcpNewReno-50

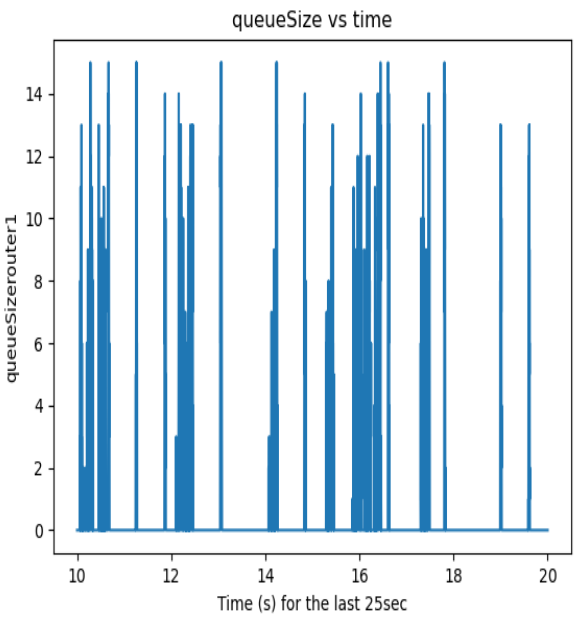




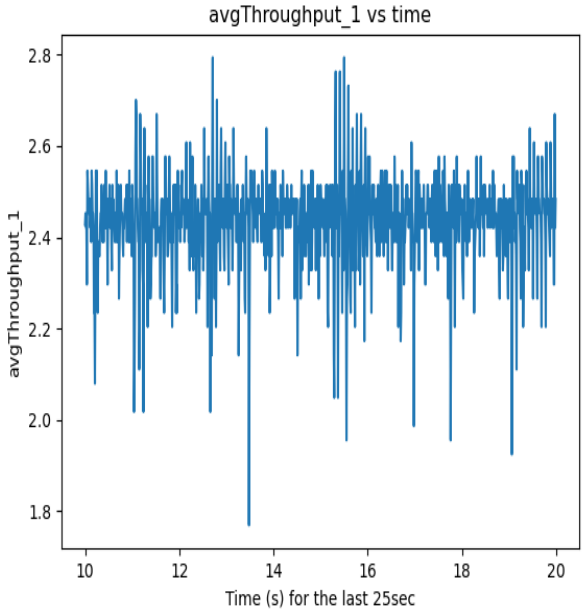


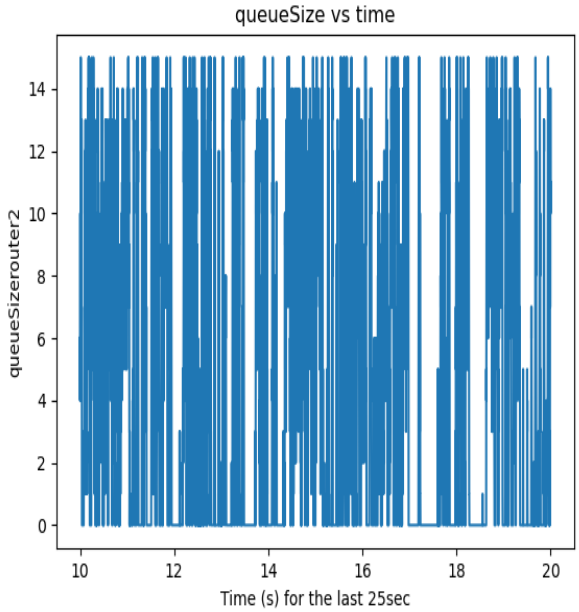


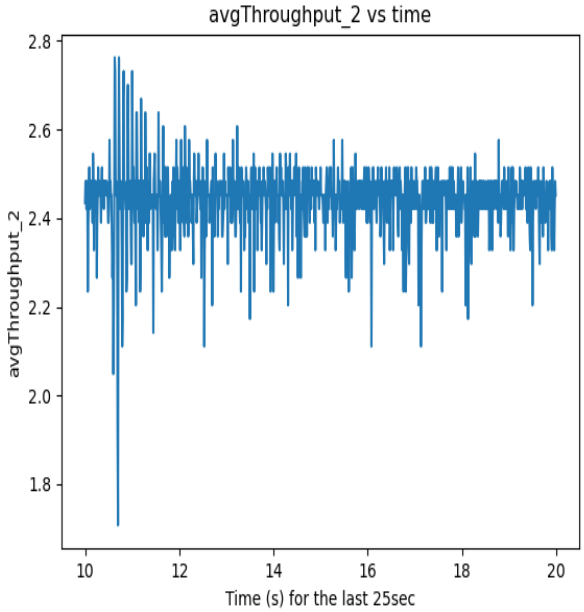

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
14
12
10
8
6
4
10
12
14
16
18
20

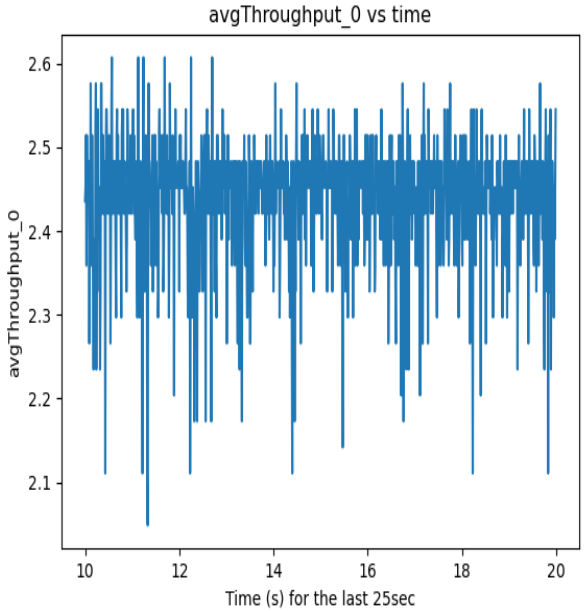

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

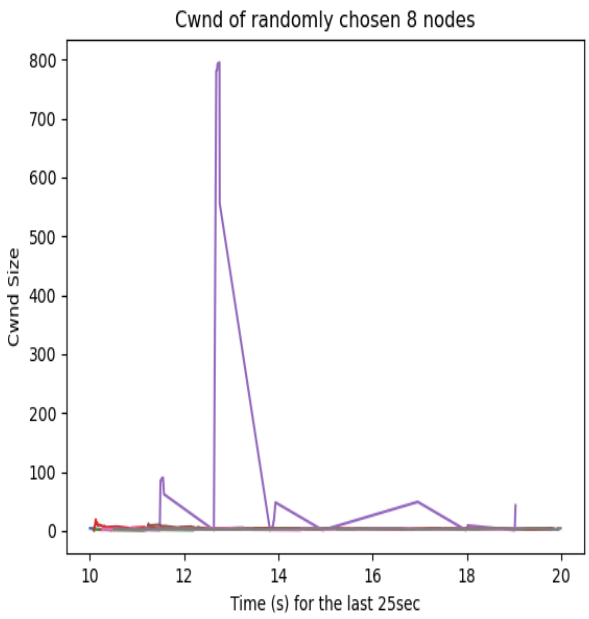
80-TcpBbr-10

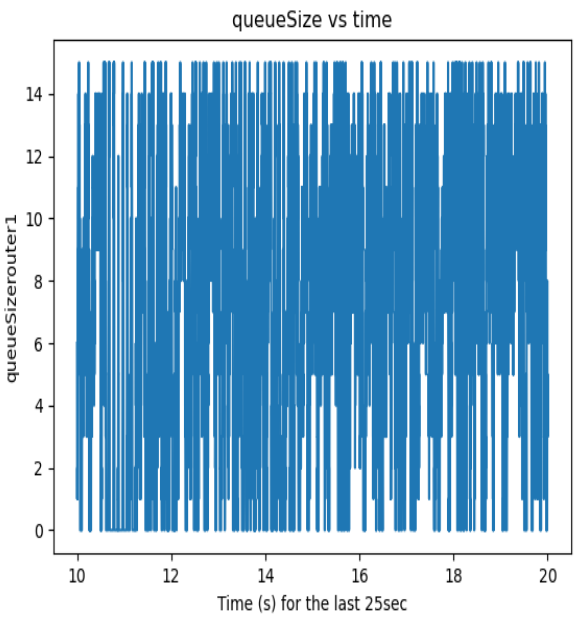

avgThroughput_1 vs time
avgThroughput_1
Time (s) for the last 25sec


queueSize vs time
queueSizerouter2
Time (s) for the last 25sec

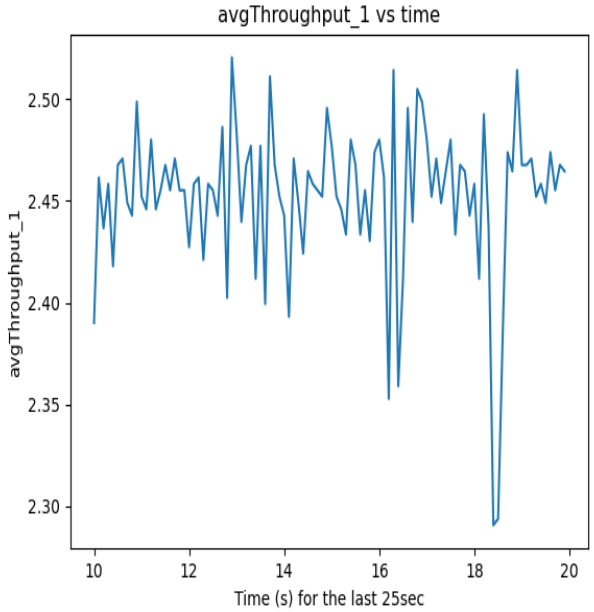

avgThroughput_2 vs time
avgThroughput_2
Time (s) for the last 25sec

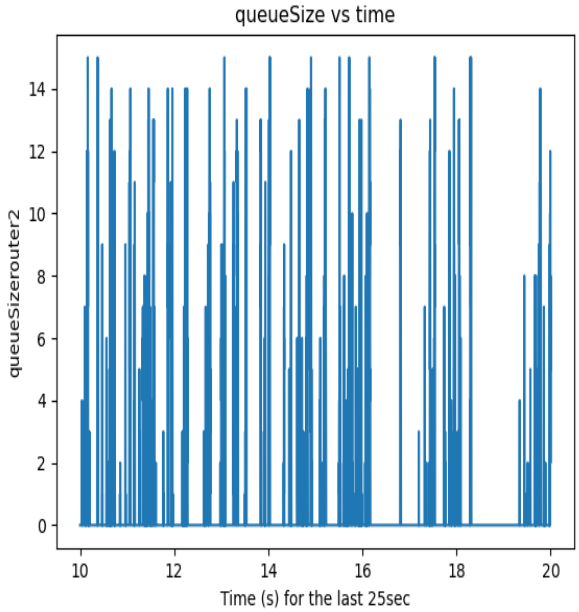

avgThroughput_0 vs time
avgThroughput_0
Time (s) for the last 25sec

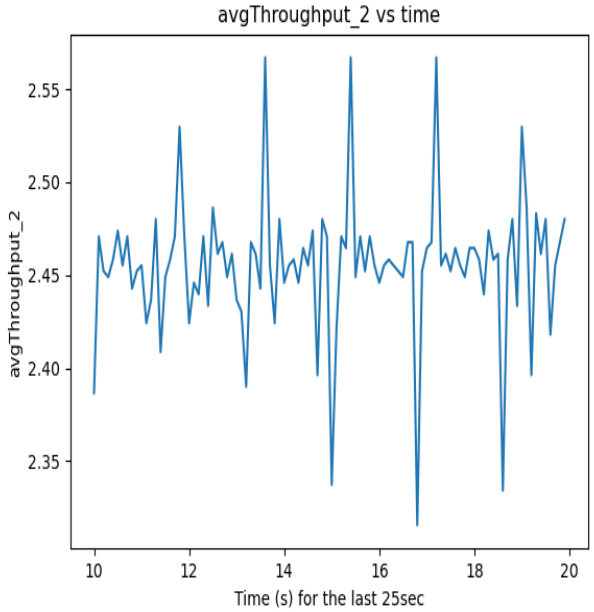

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
100
200
300
400
500
600
700
800
10
12
14
16
18
20

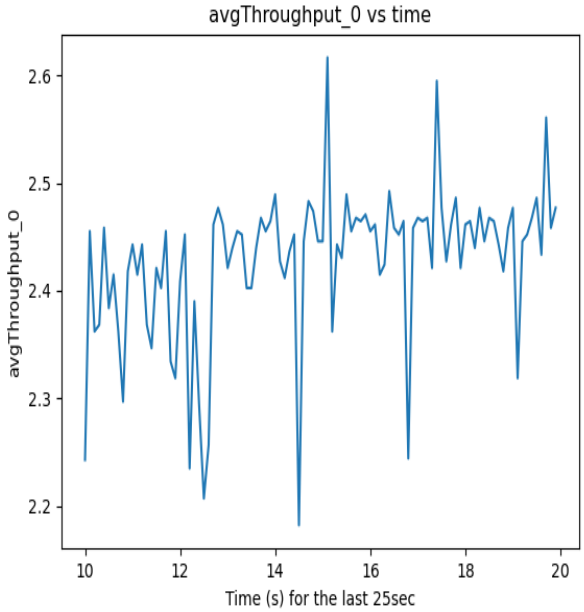

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

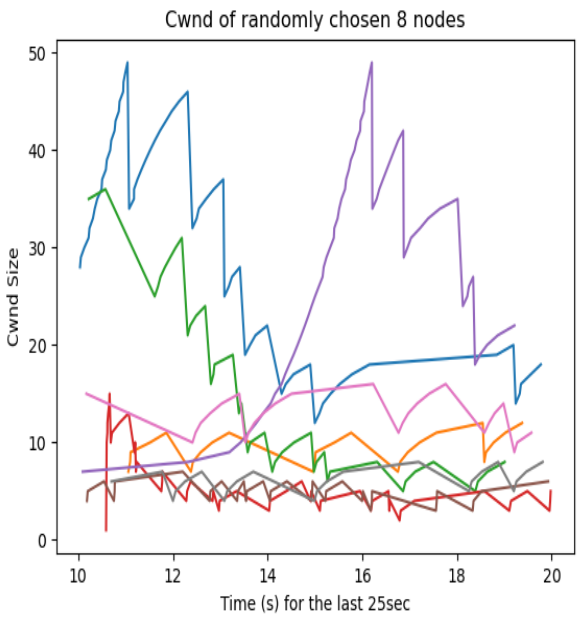
80-TcpBbr-100

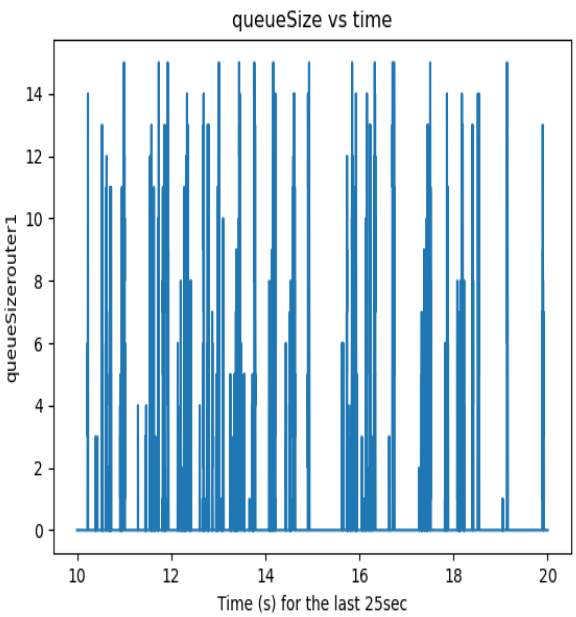




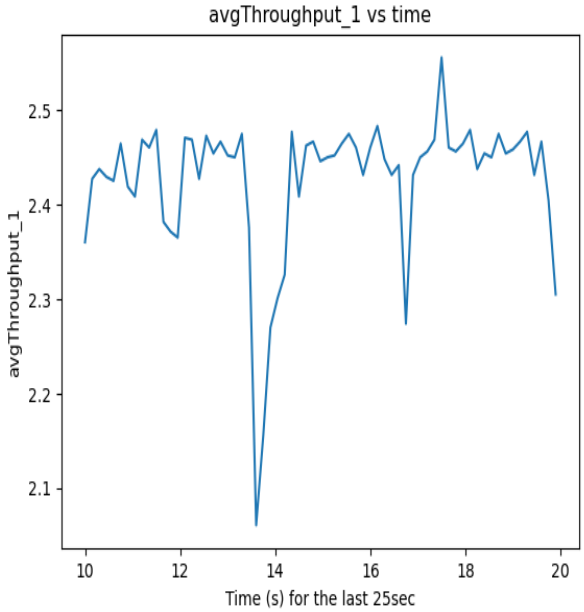


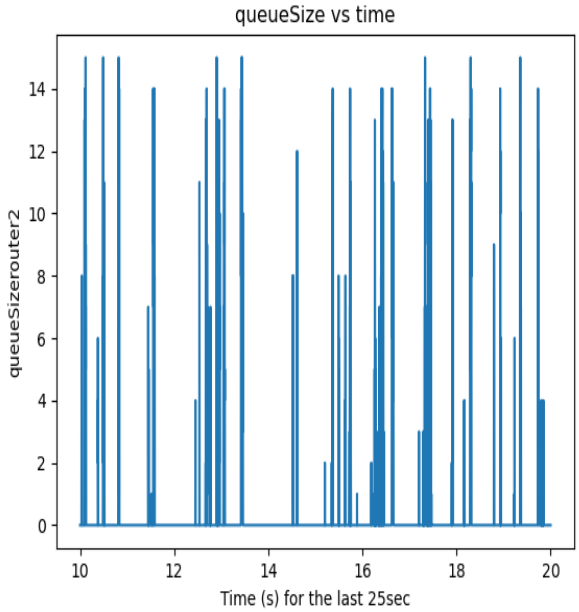


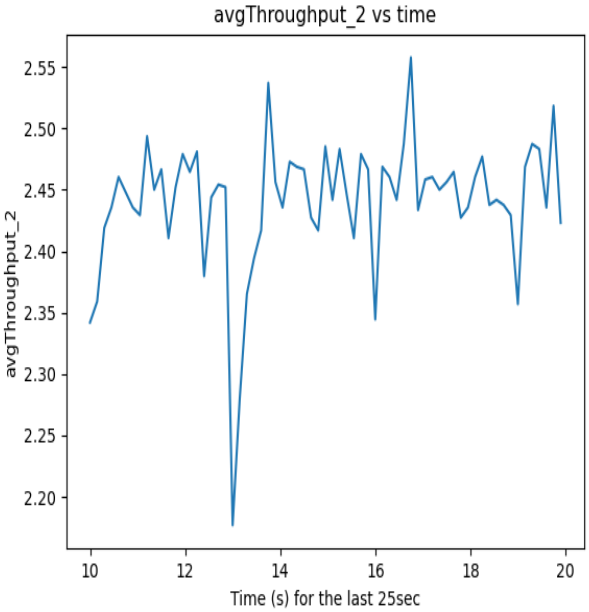

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
10
12
14
16
18
20

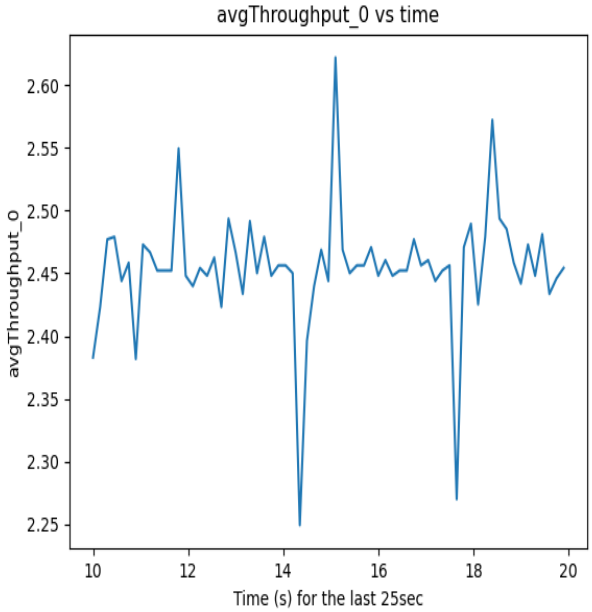

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

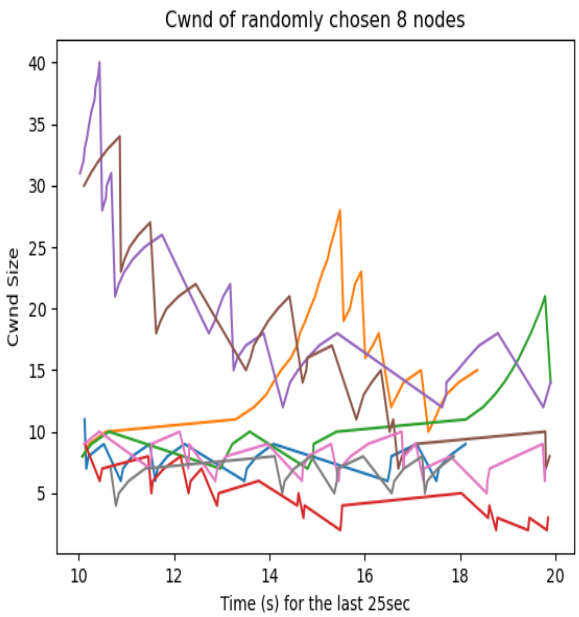
80-TcpBbr-150

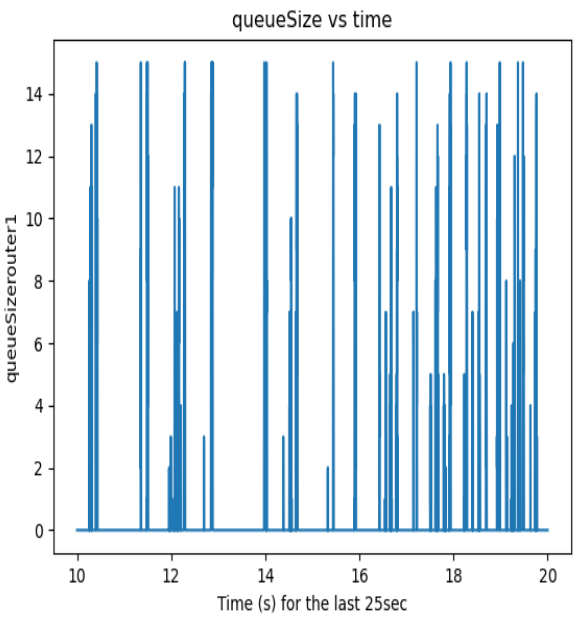




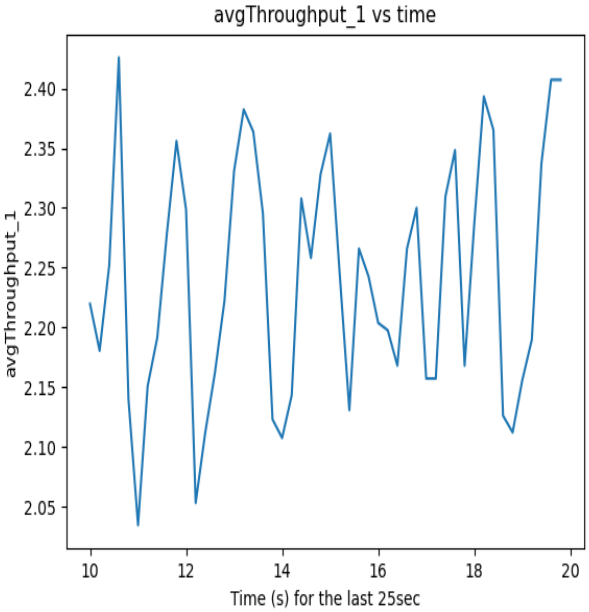


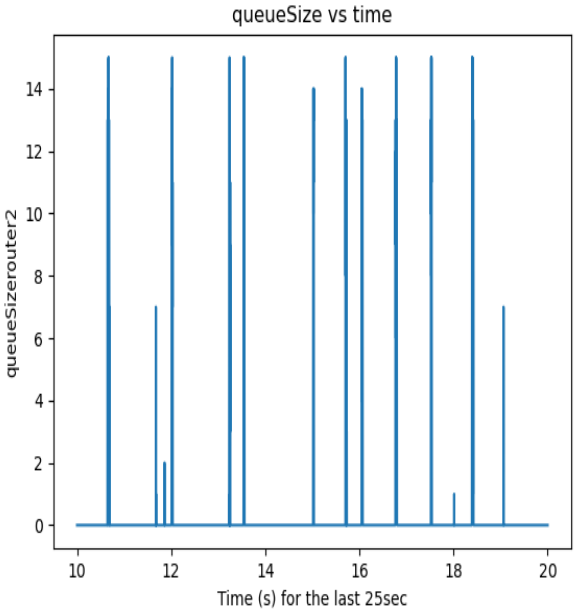


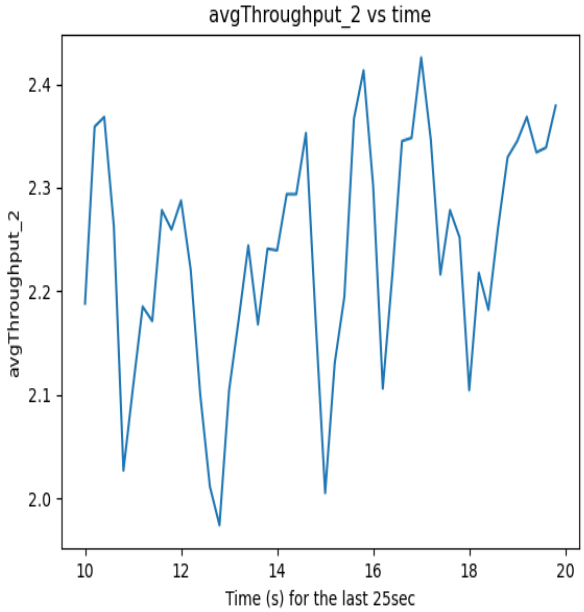

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

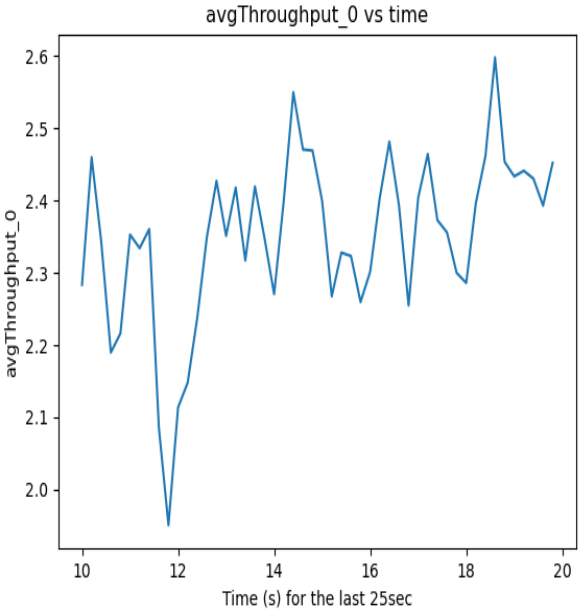

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

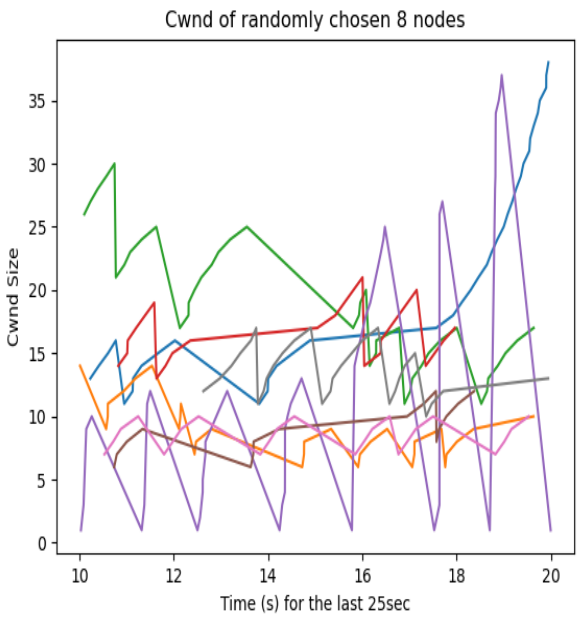
80-TcpBbr-200

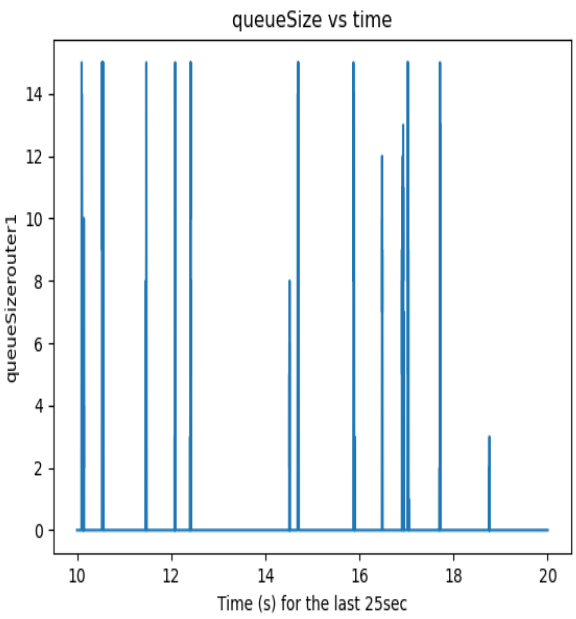




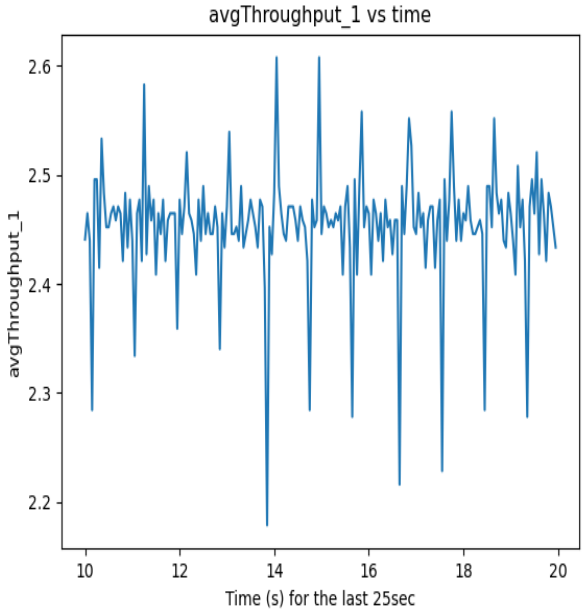


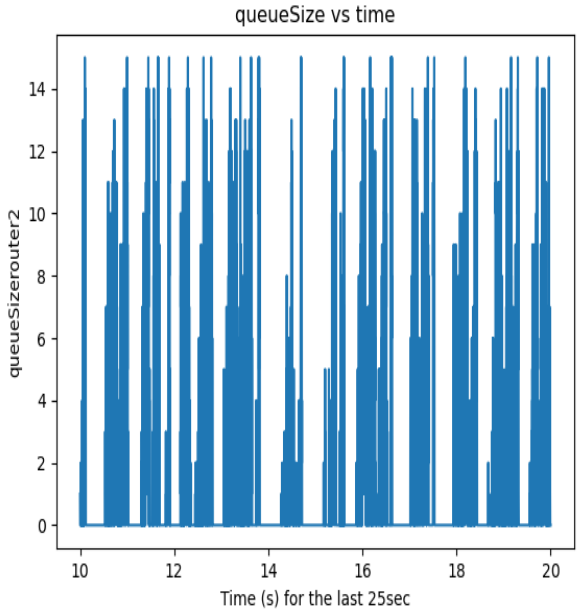


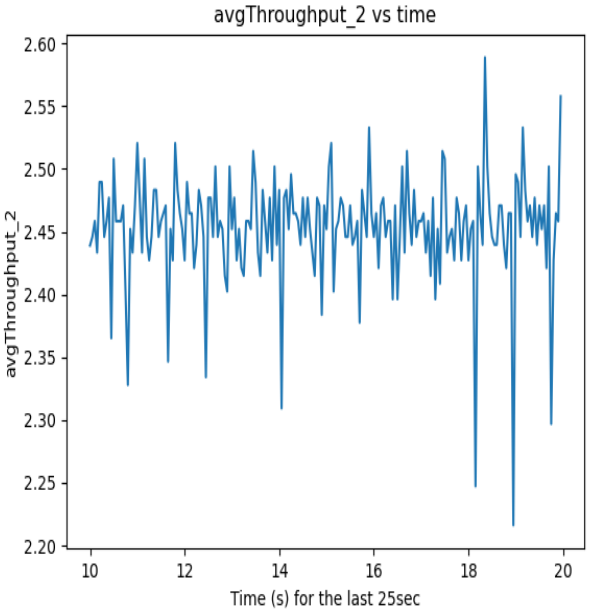

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
5
10
15
20
25
30
35
10
12
14
16
18
20

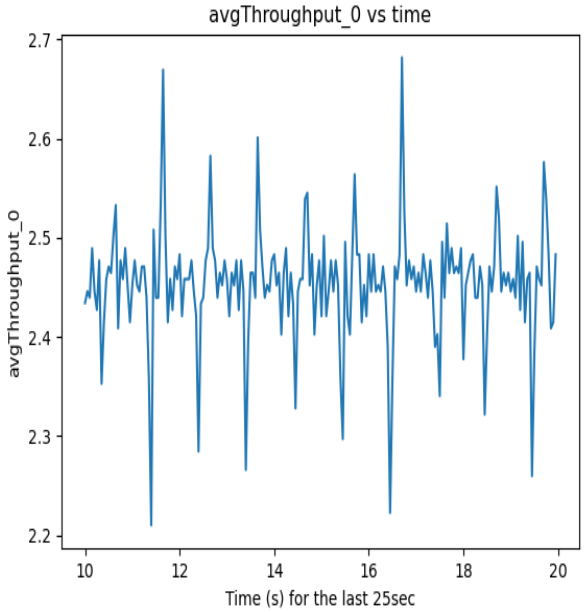

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

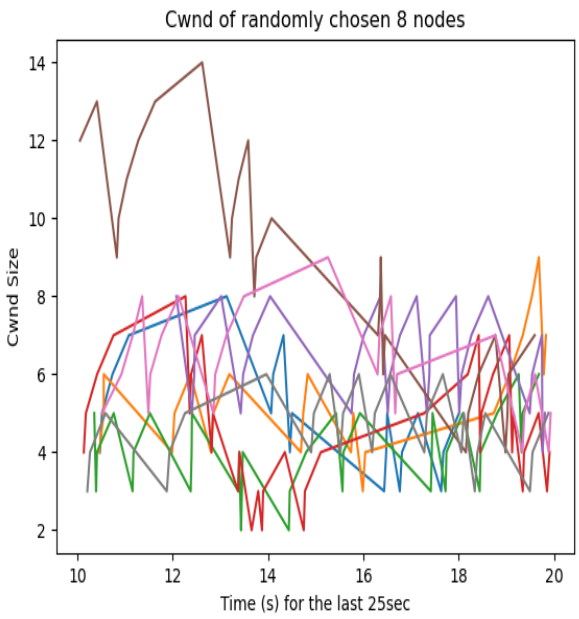
80-TcpBbr-50

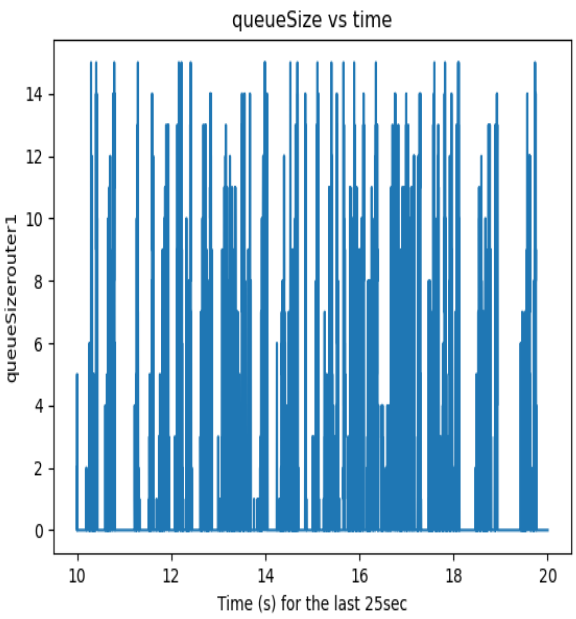

avgThroughput_1 vs time
avgThroughput_1
Time (s) for the last 25sec


queueSize vs time
queueSizerouter2
Time (s) for the last 25sec

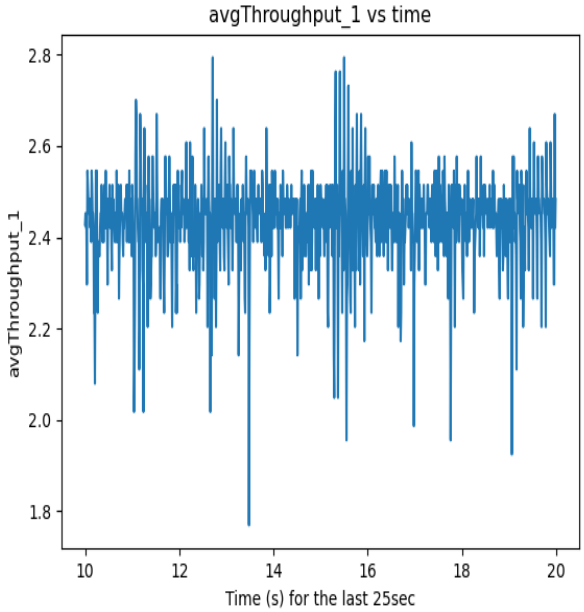

avgThroughput_2 vs time
avgThroughput_2
Time (s) for the last 25sec

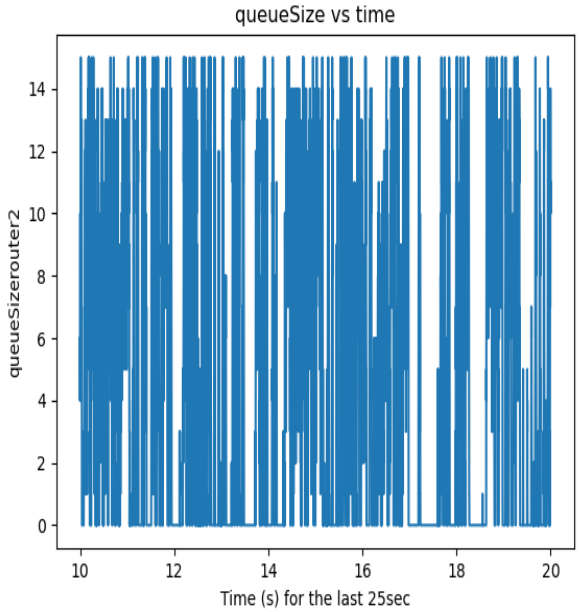

avgThroughput_0 vs time
avgThroughput_0
Time (s) for the last 25sec

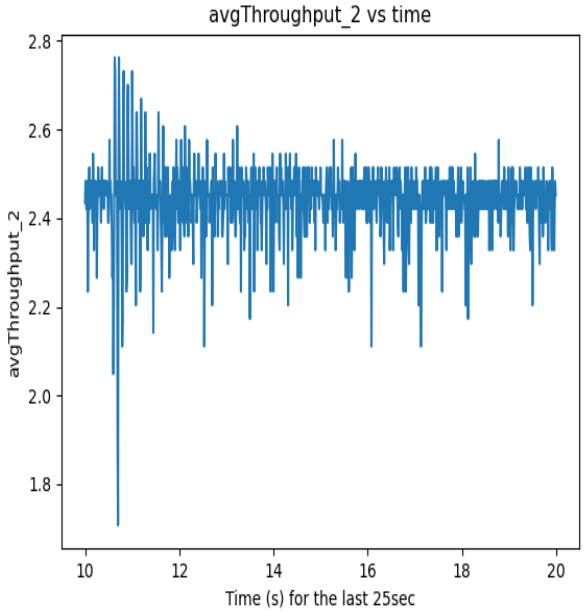

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
14
12
10
8
6
4
2
10
12
14
16
18
20

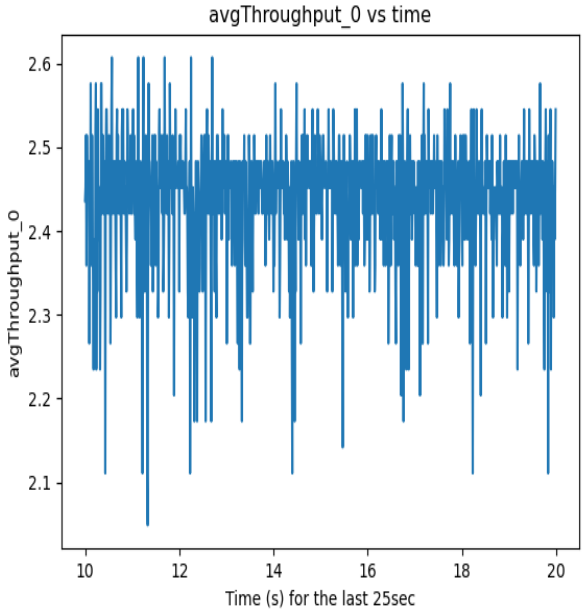

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

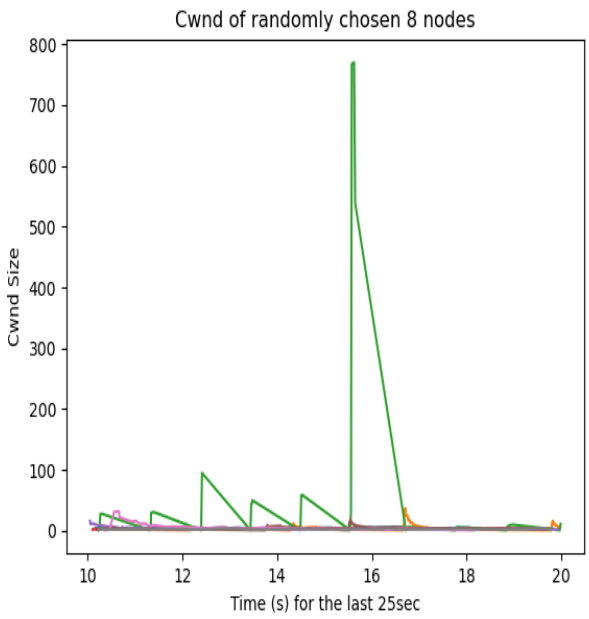
80-TcpCubic-10

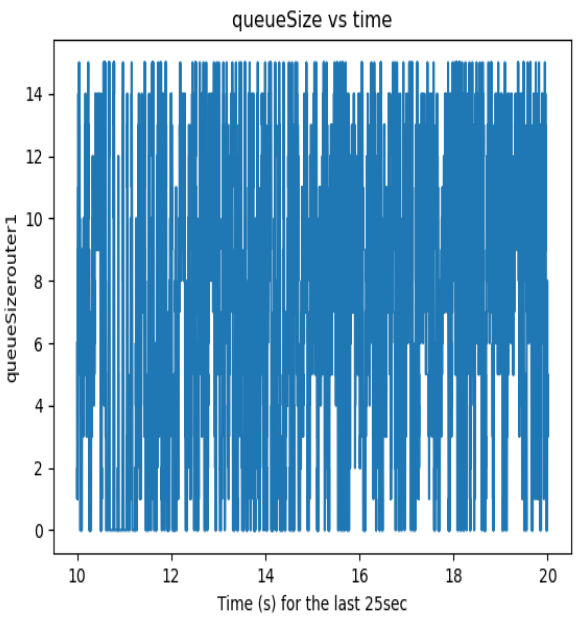




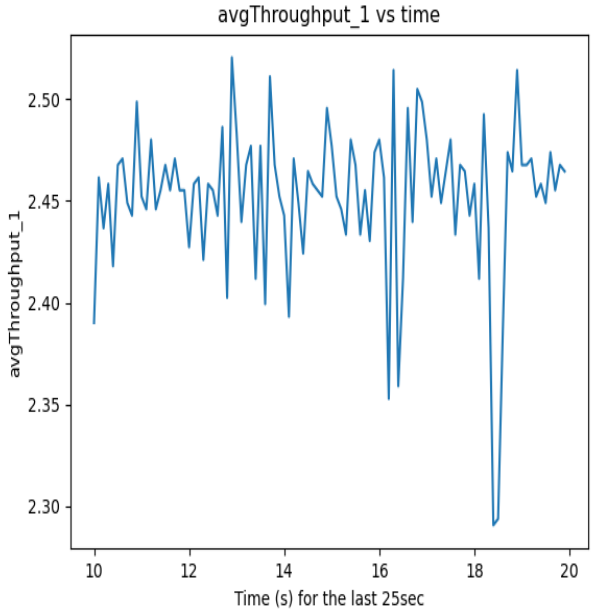


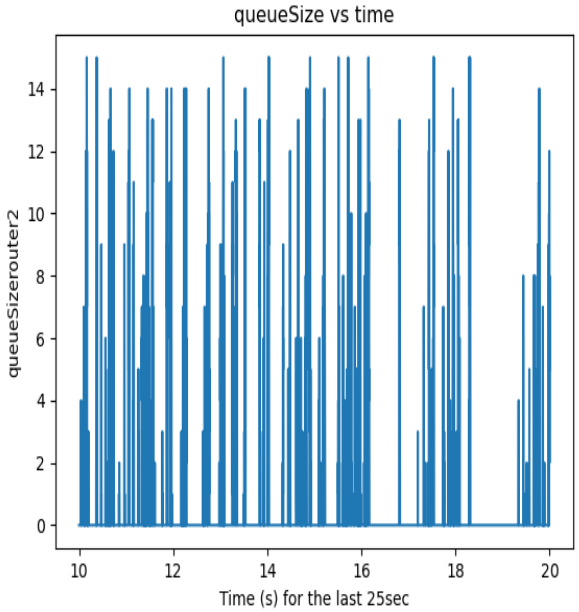


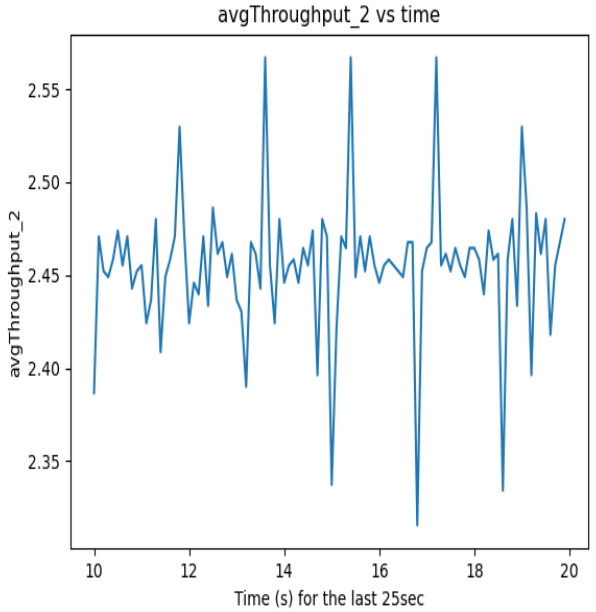

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
100
200
300
400
500
600
700
800
10
12
14
16
18
20

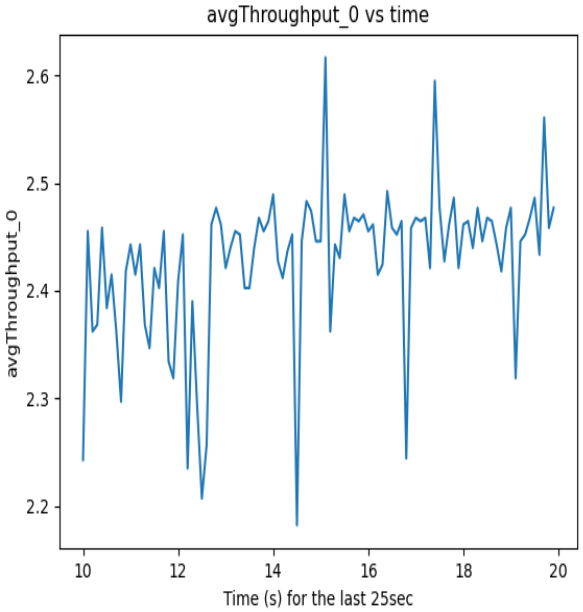

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

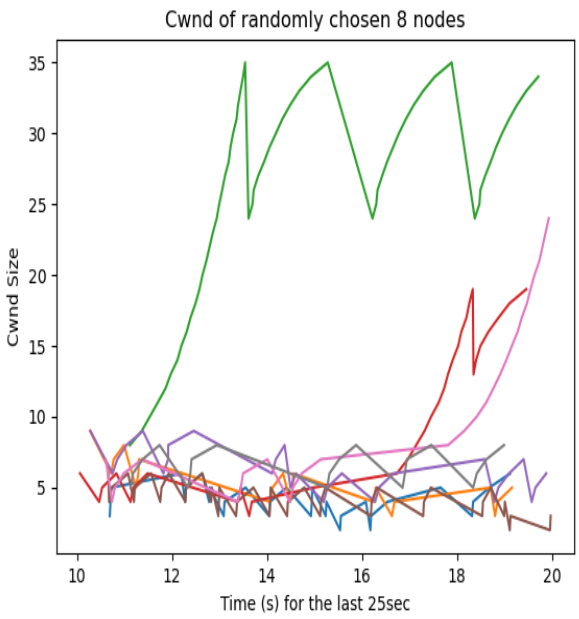
80-TcpCubic-100

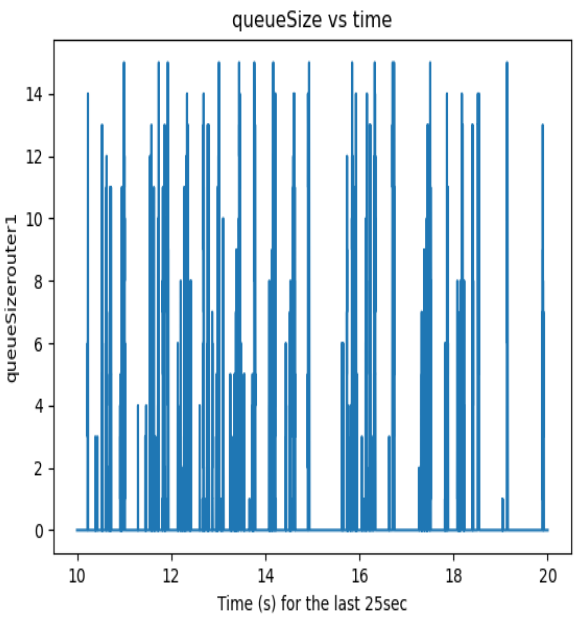




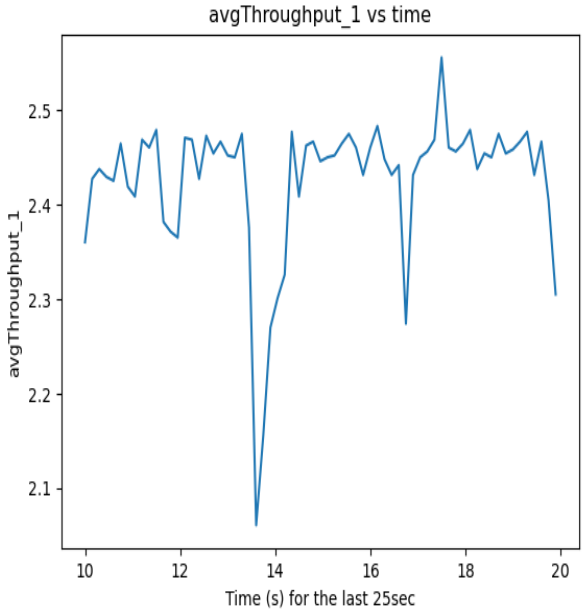


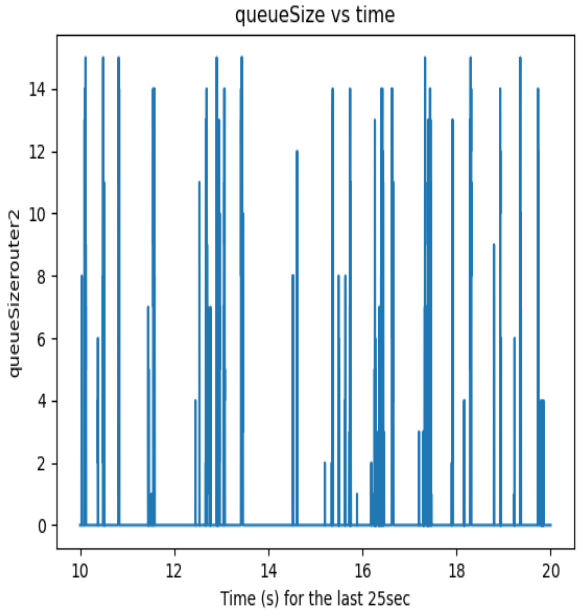


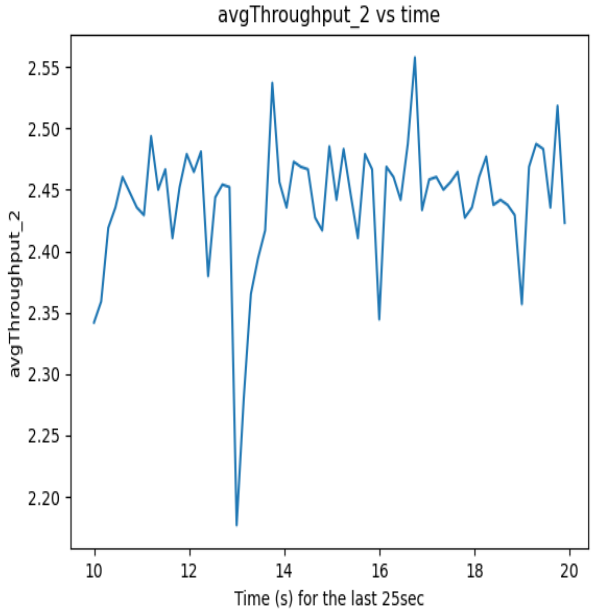

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
35
30
25
20
15
10
5
10
12
14
16
18
20

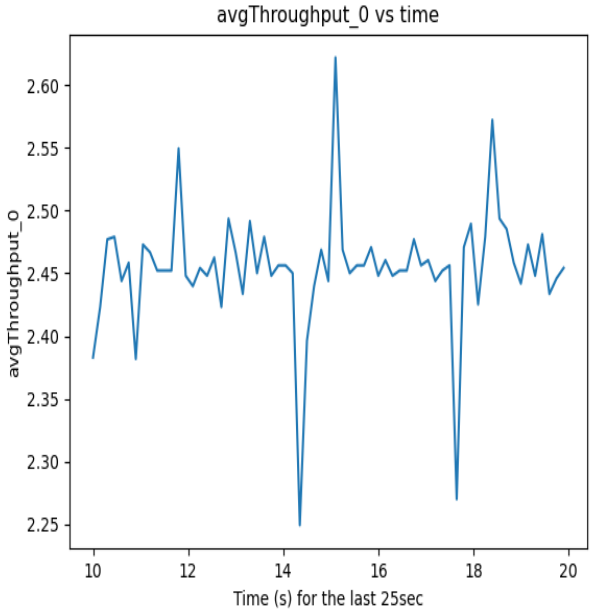

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

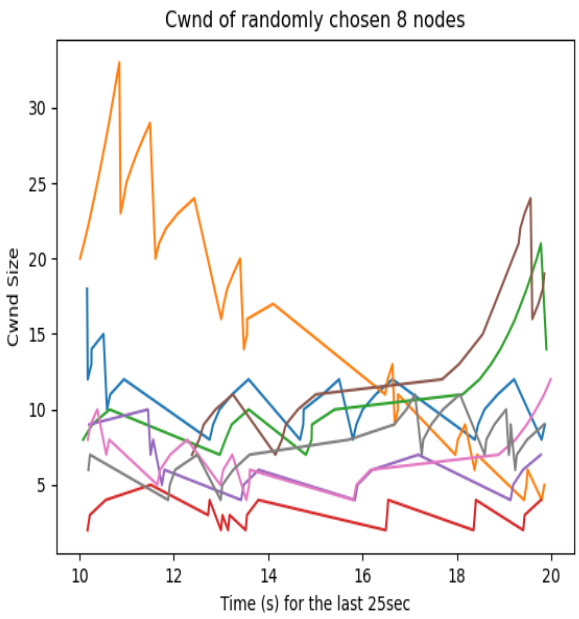
80-TcpCubic-150

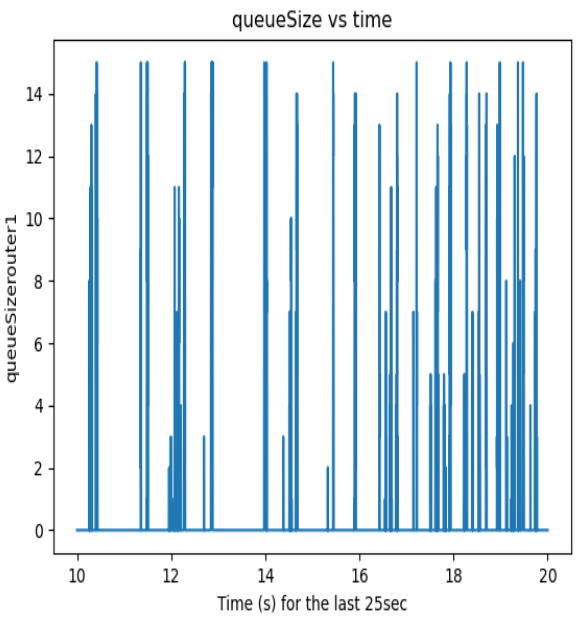




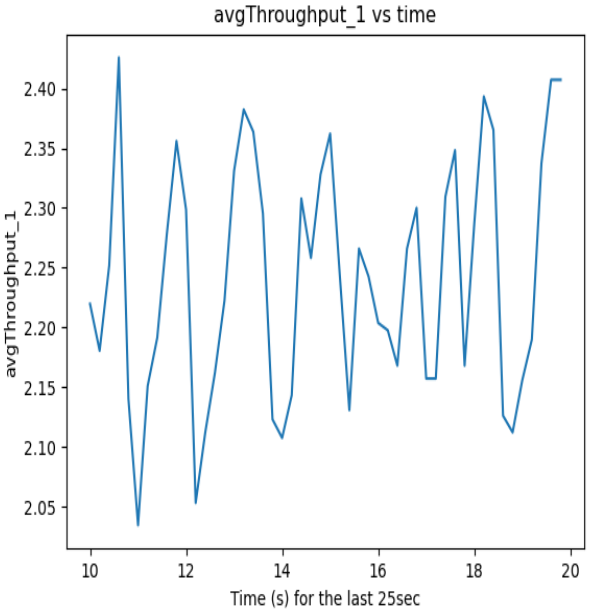


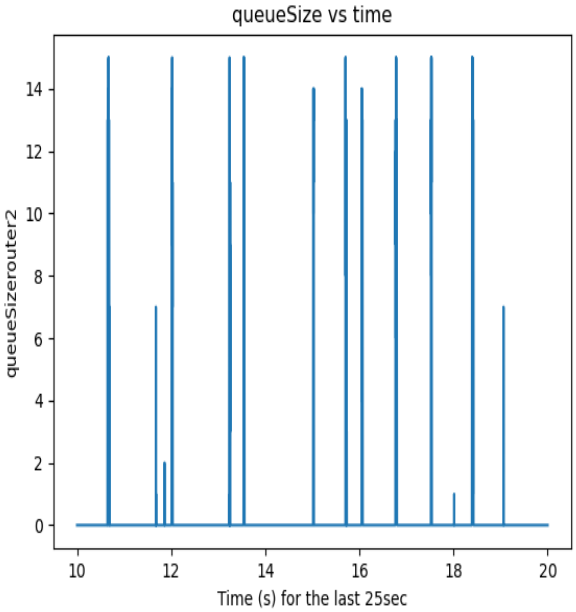


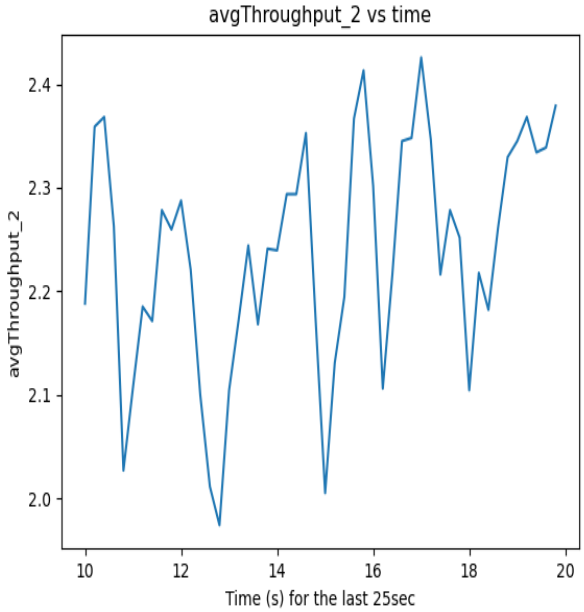

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
30
25
20
15
10
5
10
12
14
16
18
20

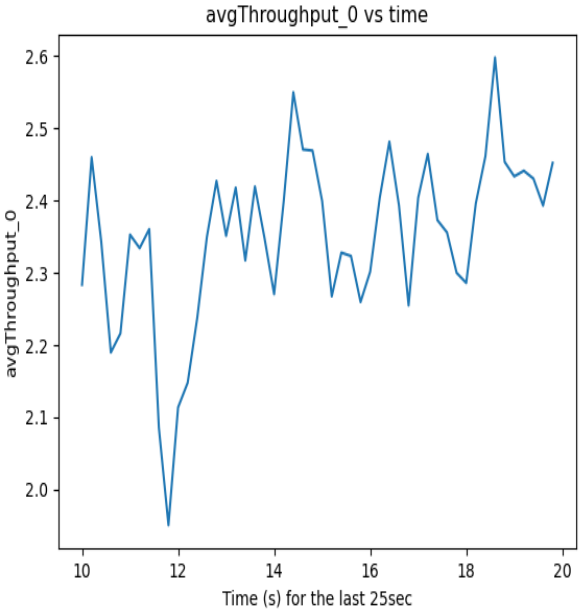

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
14
12
10
8
6
4
2
0
10
12
14
16
18
20

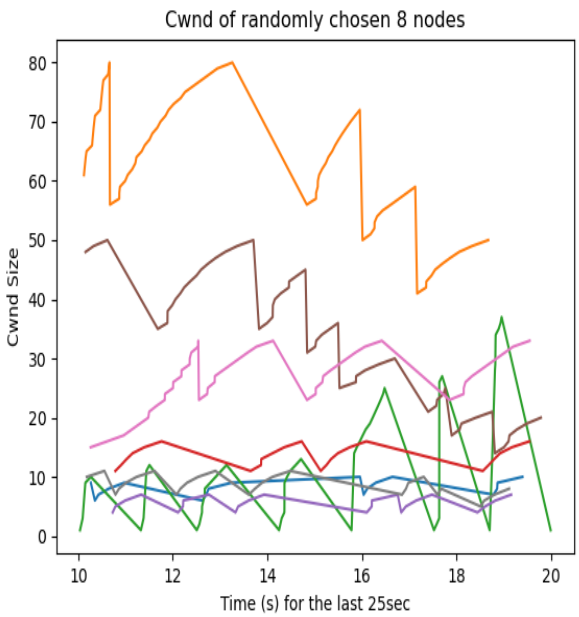
80-TcpCubic-200

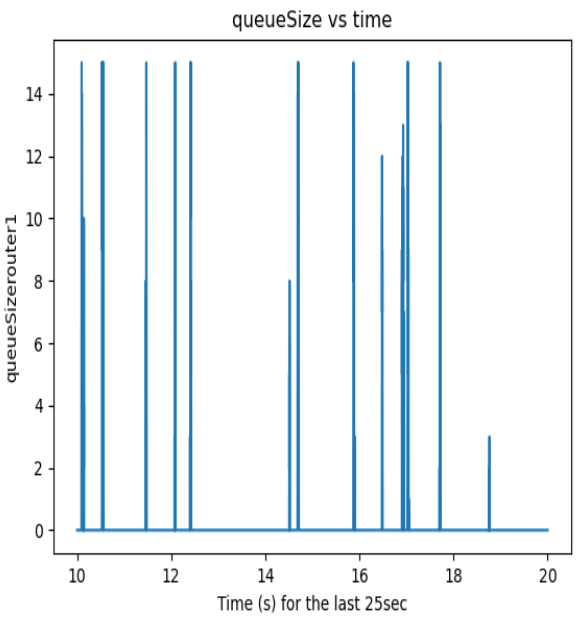




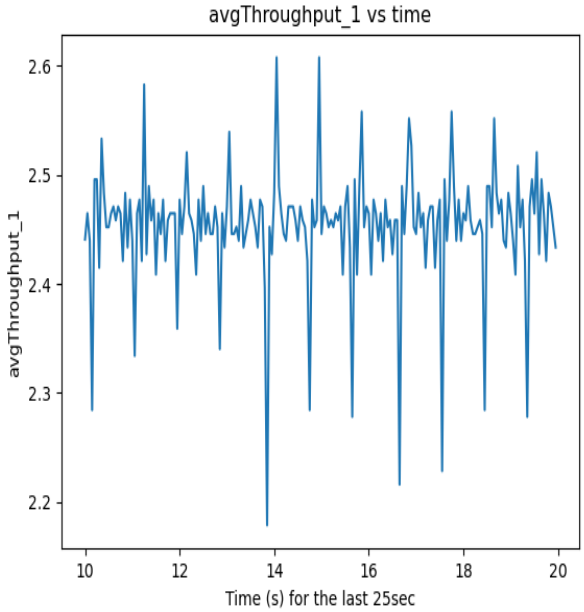


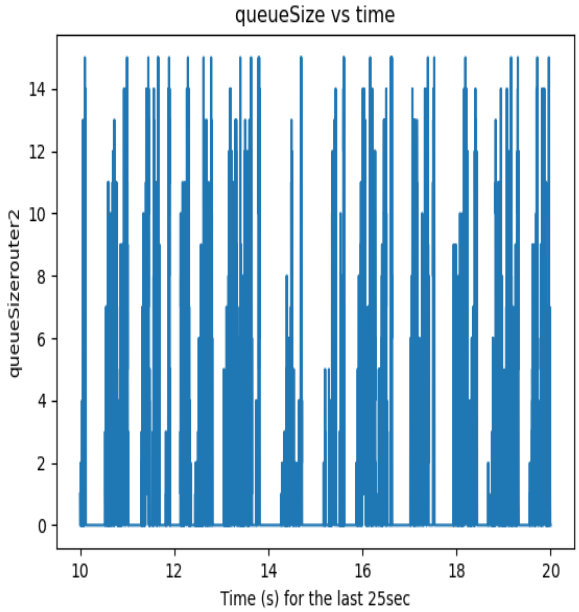


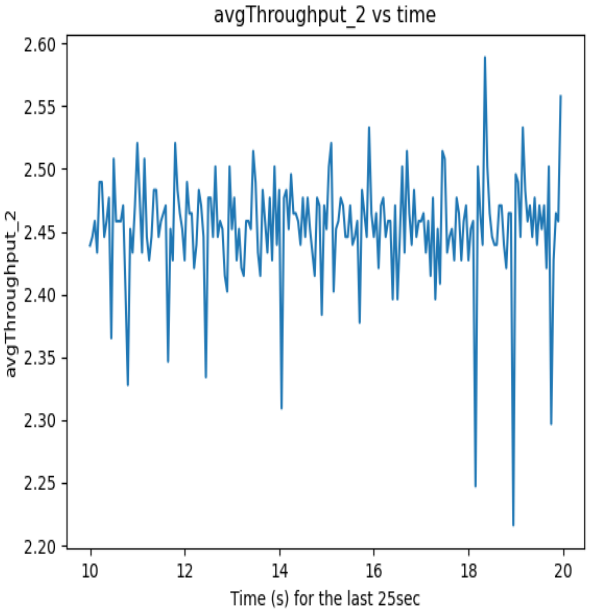

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
60
70
80
10
12
14
16
18
20

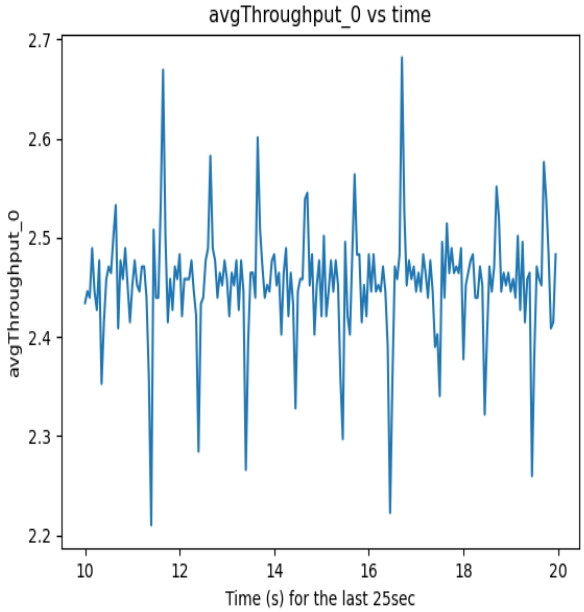

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

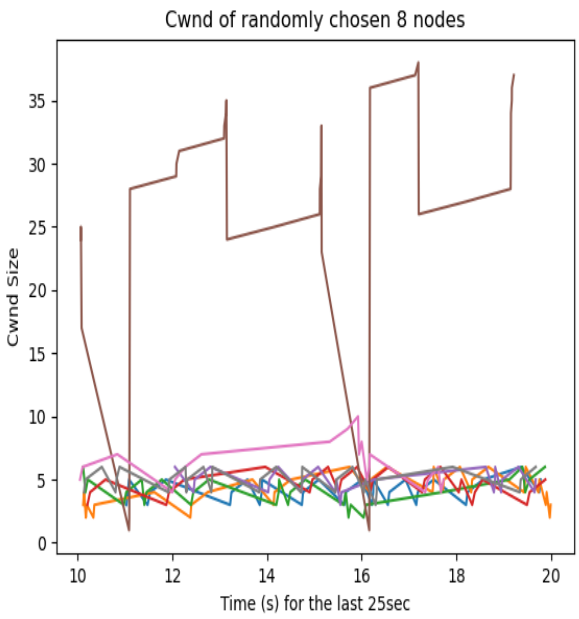
80-TcpCubic-50

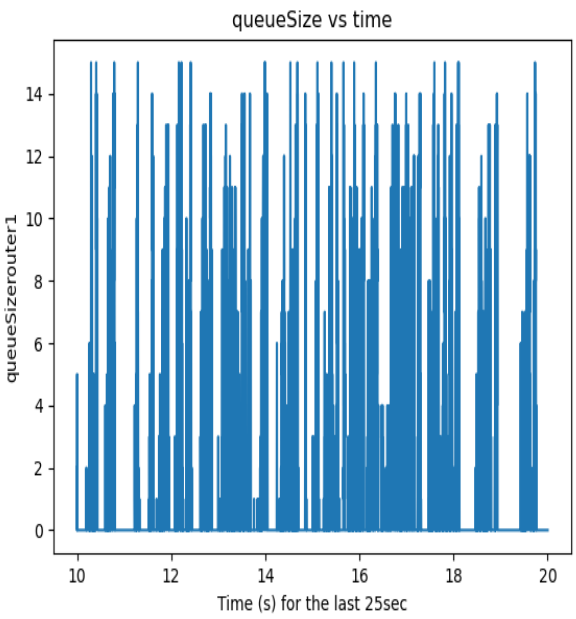




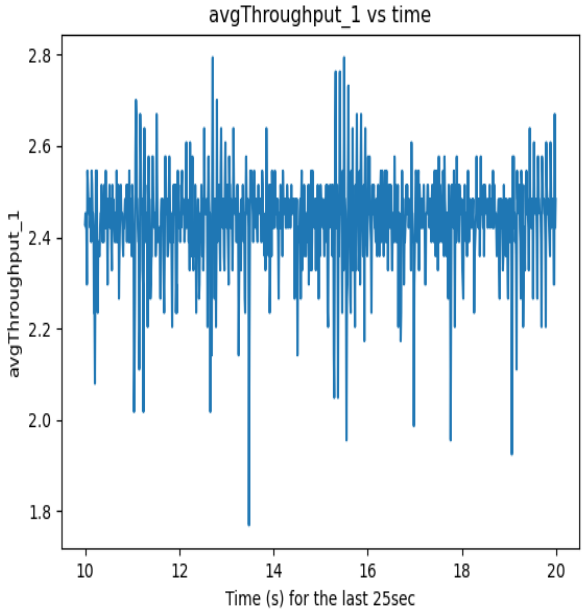


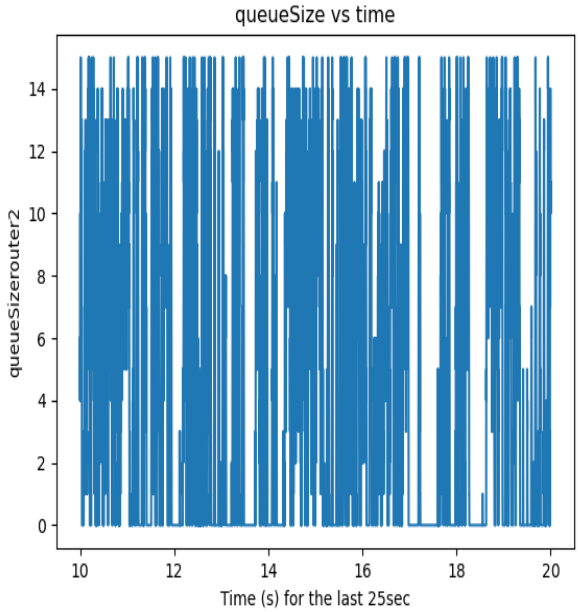


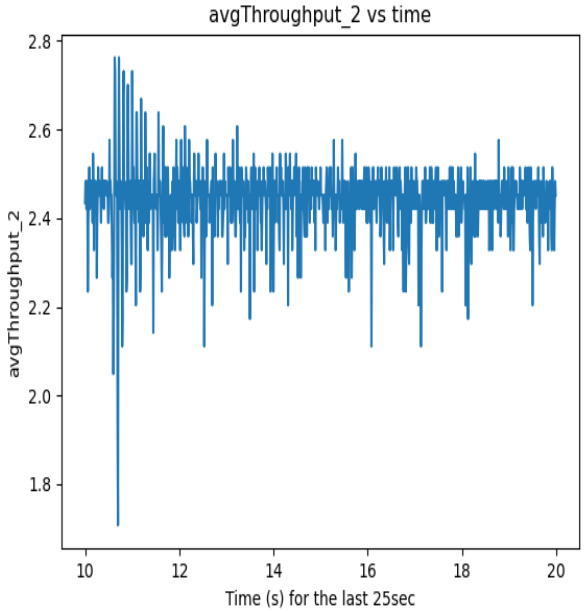

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
5
10
15
20
25
30
35
10
12
14
16
18
20

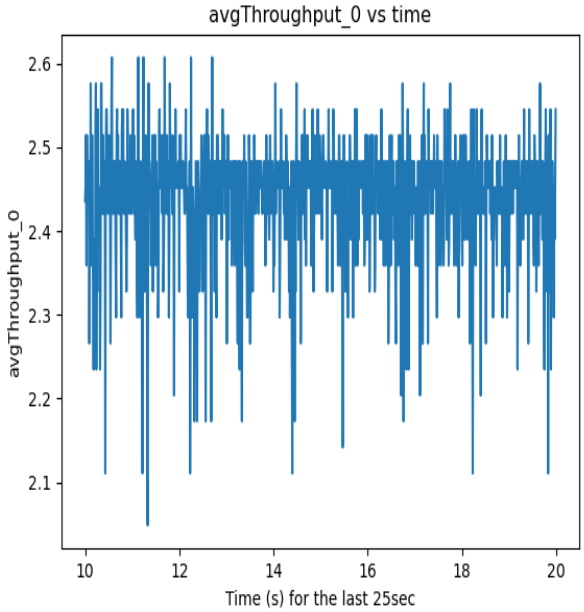

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

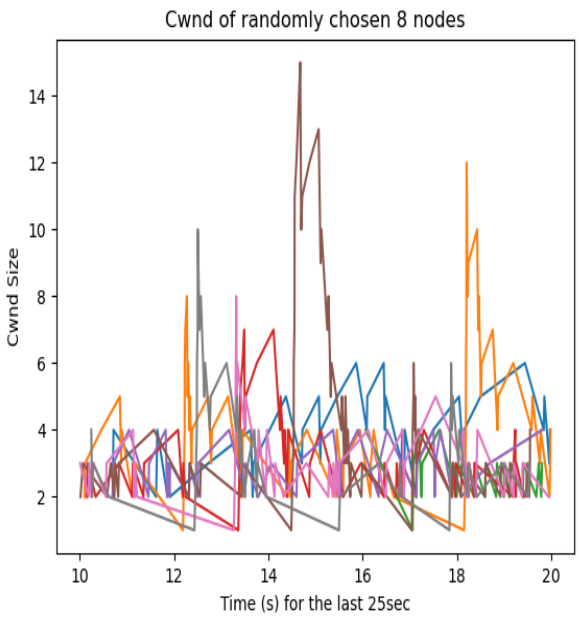
80-TcpNewReno-10

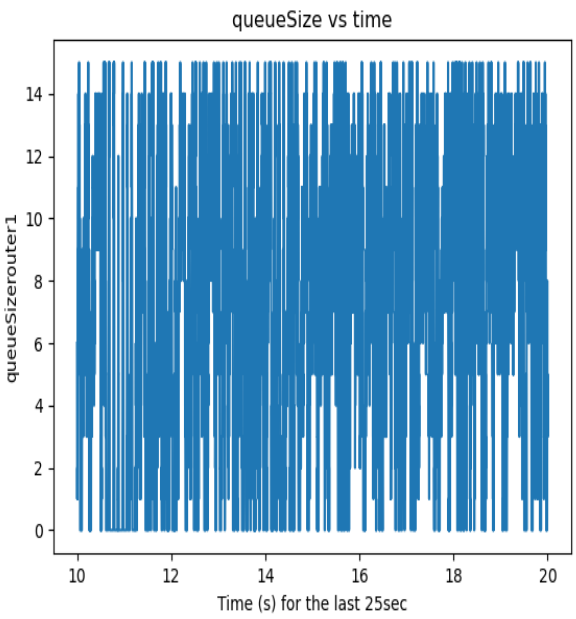




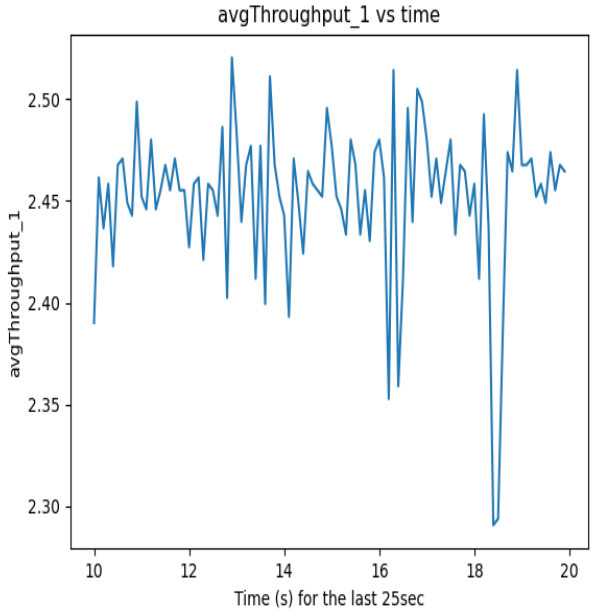


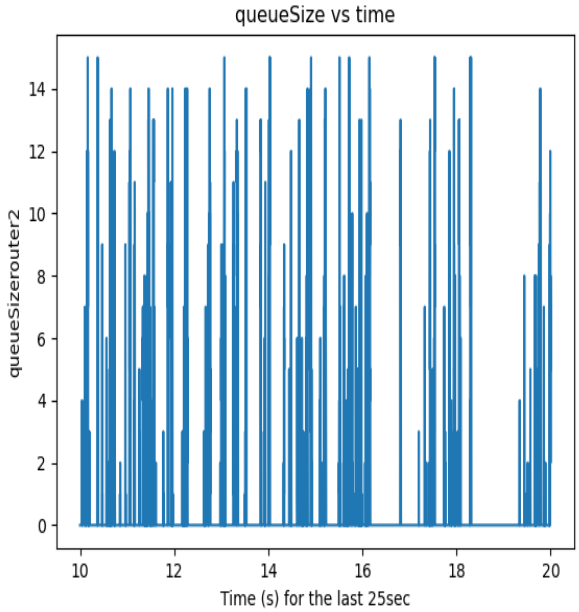


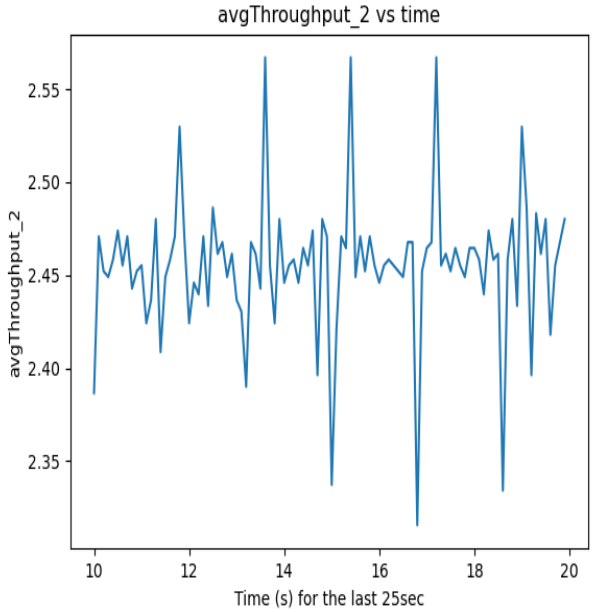

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

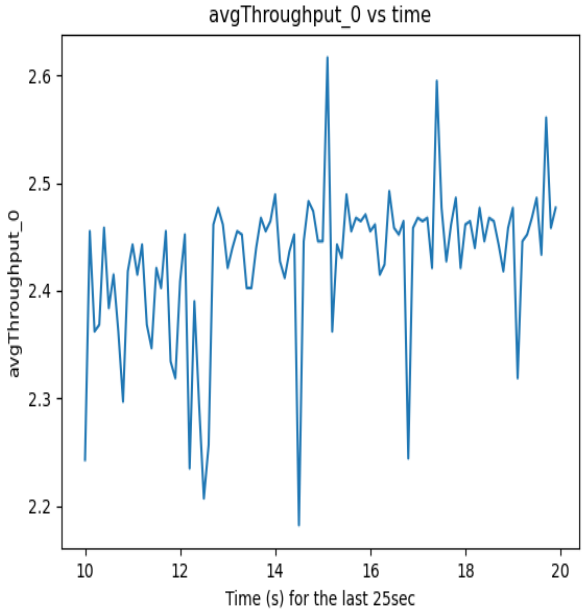

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

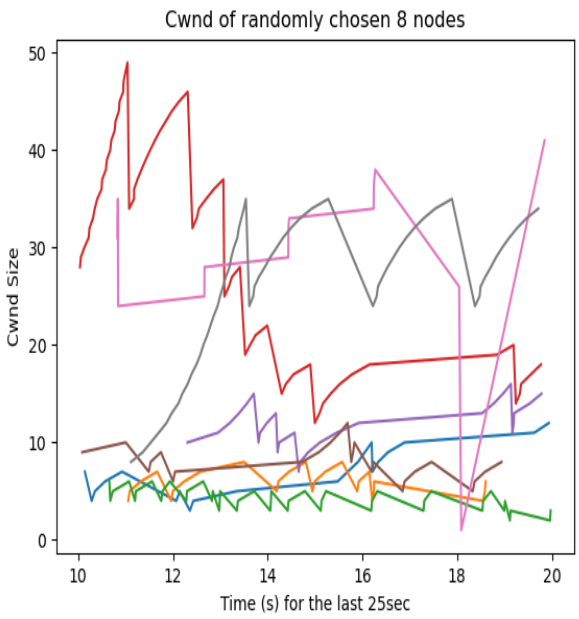
80-TcpNewReno-100

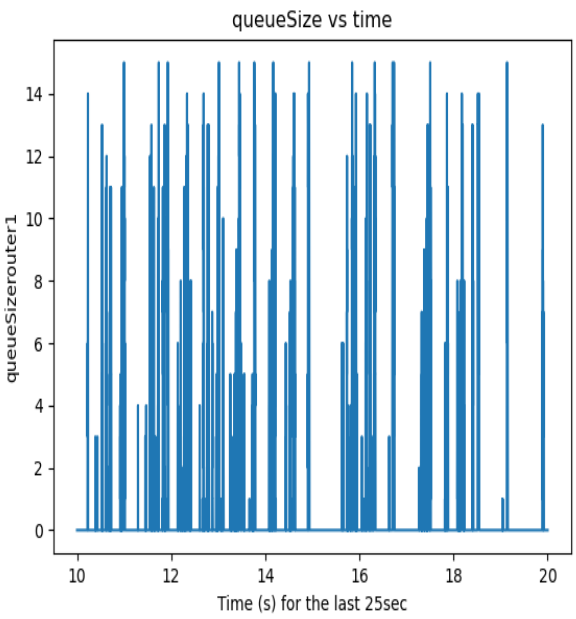




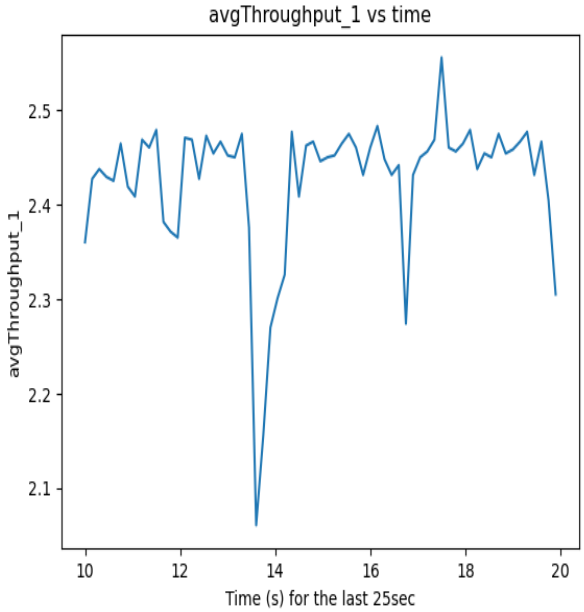


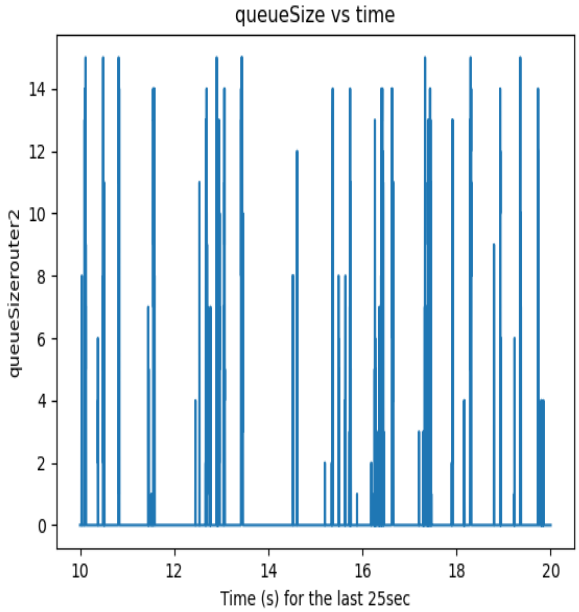


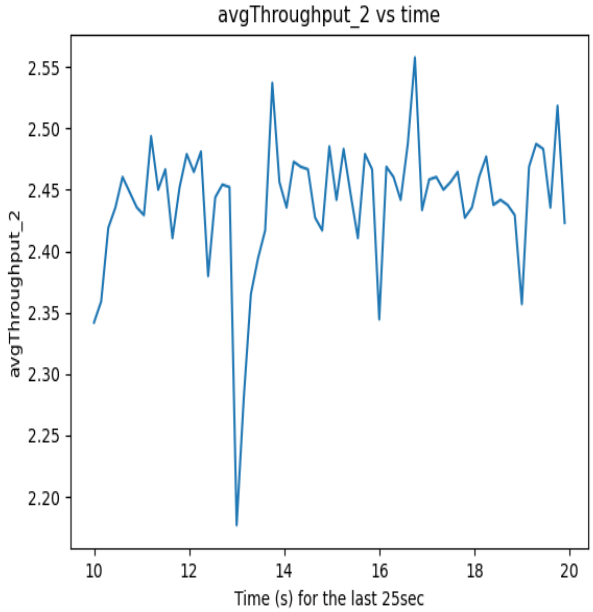

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec
0
10
20
30
40
50
10
12
14
16
18
20

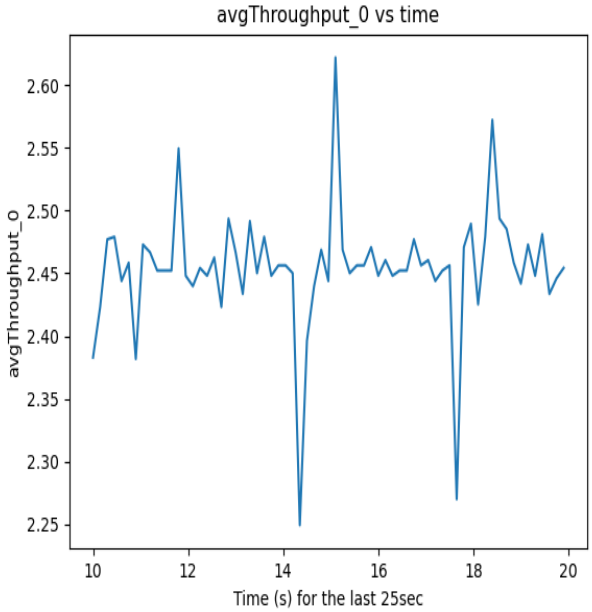

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec
0
2
4
6
8
10
12
14
10
12
14
16
18
20

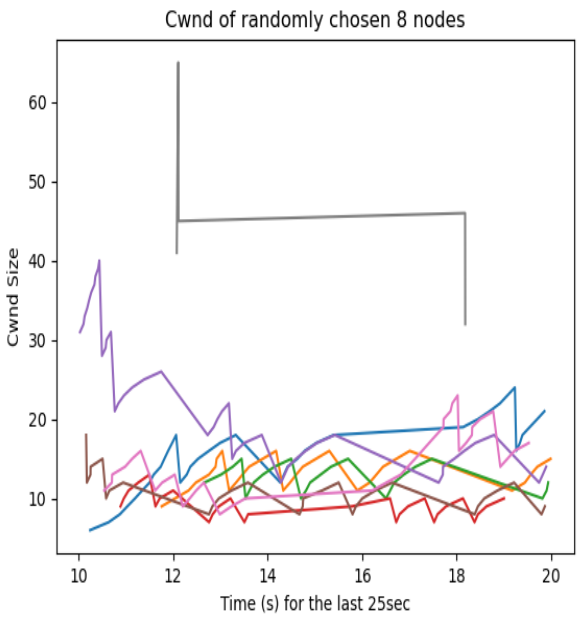
80-TcpNewReno-150

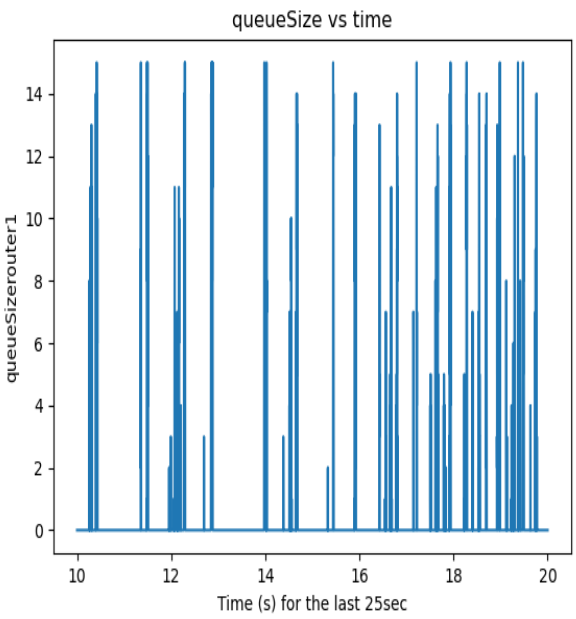




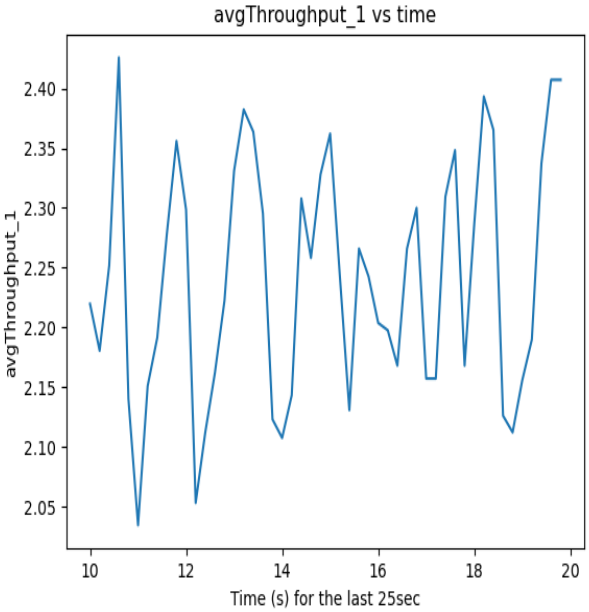


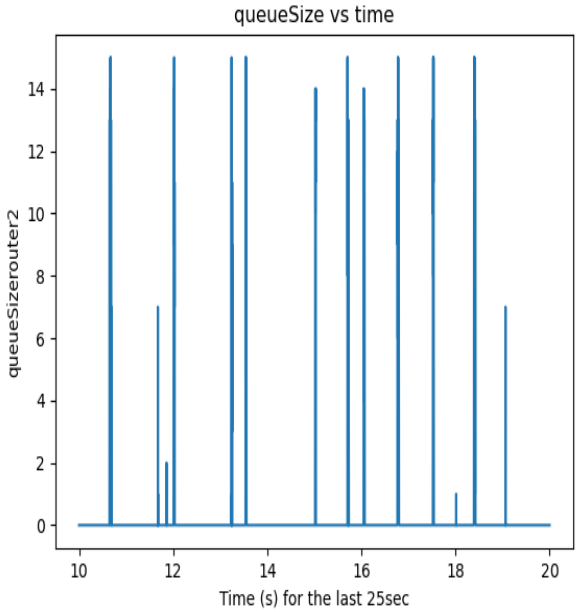


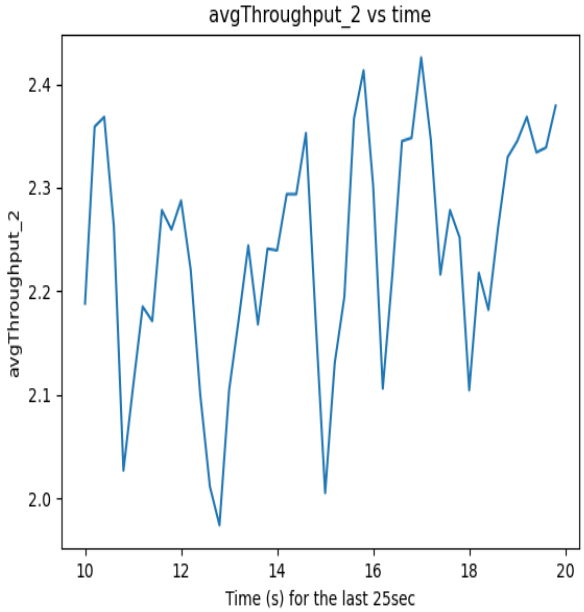

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

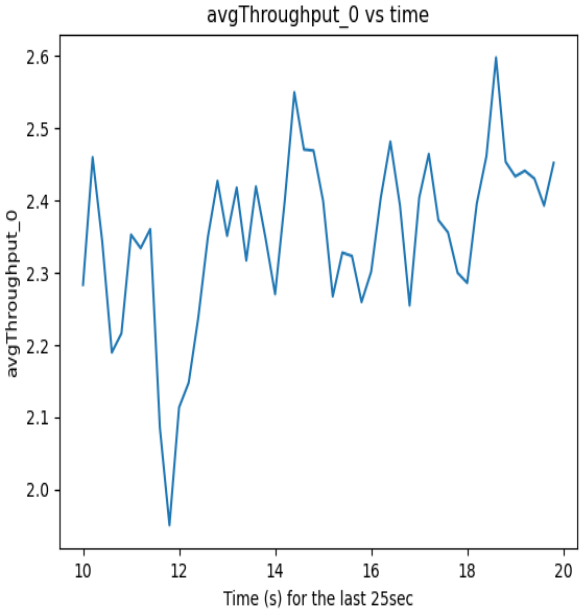

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

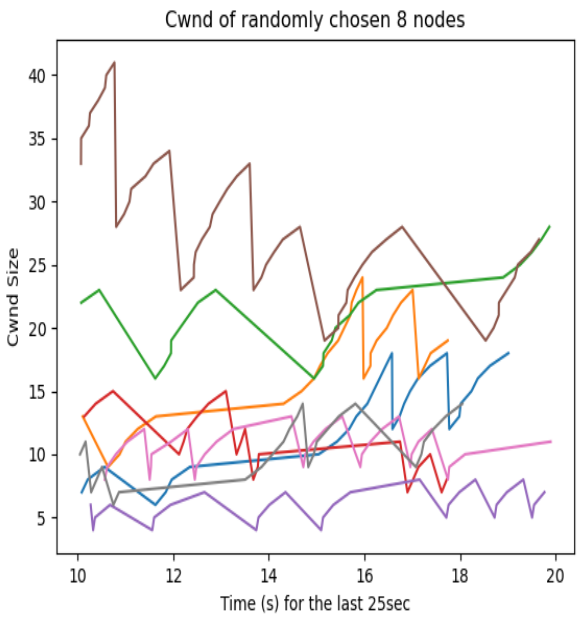
80-TcpNewReno-200

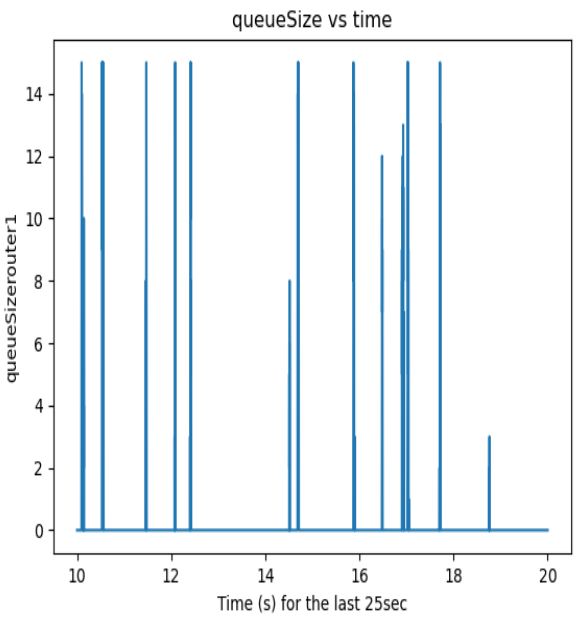




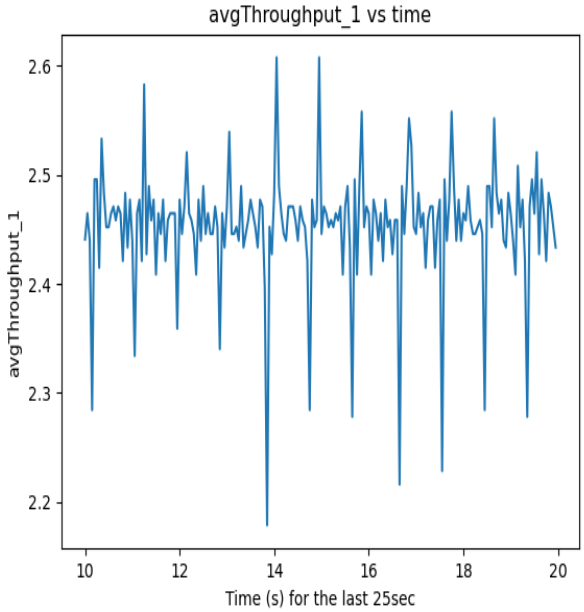


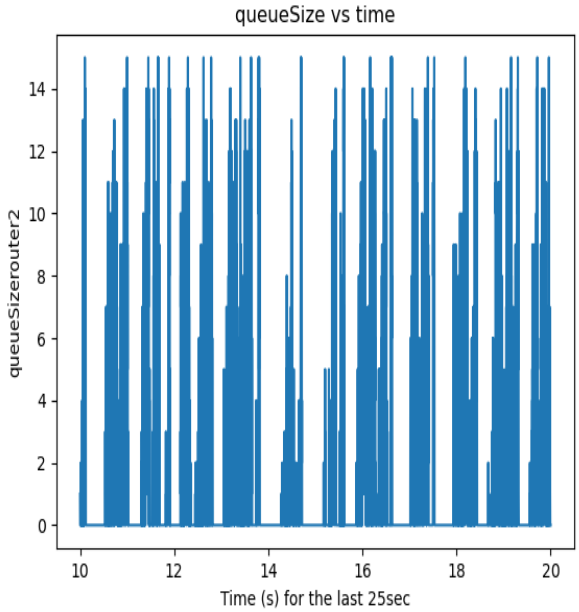


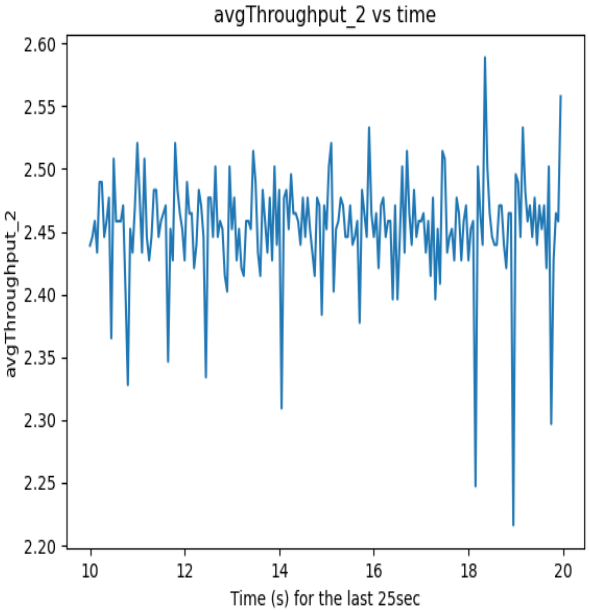

Cwnd of randomly chosen 8 nodes
Cwnd Size
Time (s) for the last 25sec

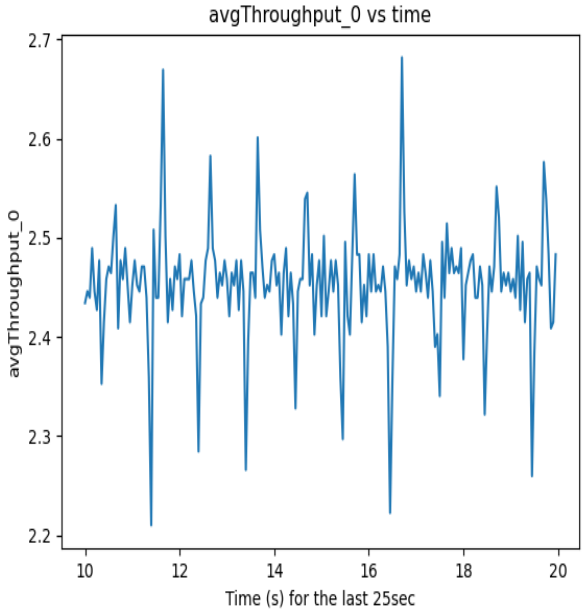

queueSize vs time
queueSizerouter1
Time (s) for the last 25sec

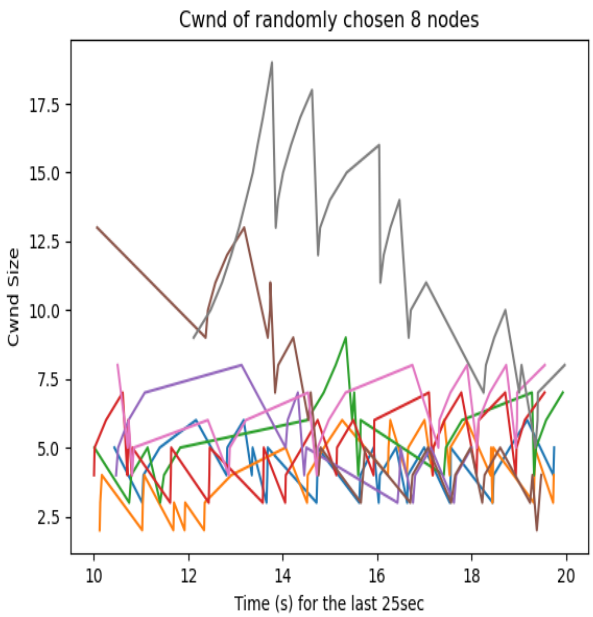
80-TcpNewReno-50

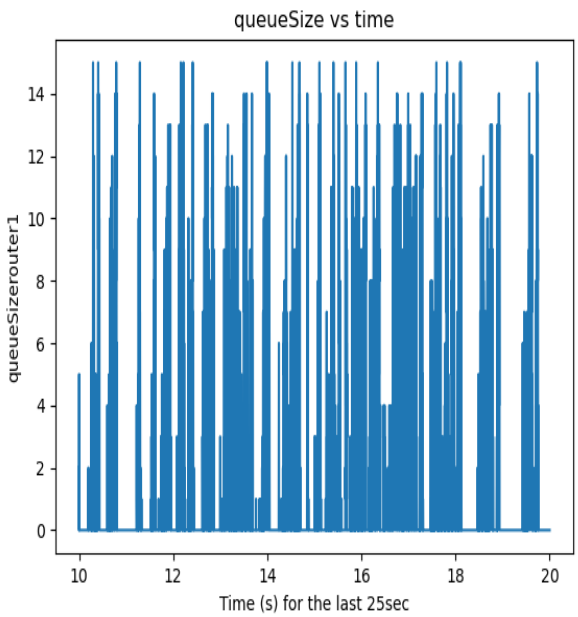









Cwnd of randomly chosen 8 nodes
Cwnd Size
17.5
15.0
12.5
10.0
7.5
5.0
2.5
10
12
14
16
18
20
Time (s) for the last 25sec


queueSize vs time
queueSizerouter1
14
12
10
8
6
4
2
0
10
12
14
16
18
20
Time (s) for the last 25sec