

The first  $N$  seconds of downstream packets per streaming session

0s

$T_s$

$2T_s$

$\vdots$

$nT_s$

Packet group  
labeler

Packet  
groups

Full

Steady

Sparse

Metrics

Packet  
count

Payload  
size

Inter-arrival  
time

Representation  
functions

Sum

Mean

Med

Min

Max

Std

Kurtosis

Skew

51 attributes for  
game title classification

*full\_ct\_sum[n]*  
*full\_sz\_sum[n]*  
*full\_sz\_mean[n]*  
 $\vdots$   
*full\_it\_skew[n]*

17 attrs

*steady\_ct\_sum[n]*  
*steady\_sz\_sum[n]*  
*steady\_sz\_mean[n]*  
 $\vdots$   
*steady\_it\_skew[n]*

17 attrs

*sparse\_ct\_sum[n]*  
*sparse\_sz\_sum[n]*  
*sparse\_sz\_mean[n]*  
 $\vdots$   
*sparse\_it\_skew[n]*

17 attrs

