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LIST OF ABBREVIATIONS

HAR	Human Activity Recognition
HMM	Hidden Markov Model
CNN	Convolutional Neural Network
CRNN	Convolutional Recurrent Neural Network
RNN	Recurrent Neural Network
LSTM	Long Short Term Network
ResNet	Residual Network.
TCN	Temporal Convolutional Network
GRU	Gated Recurrent Unit
DMHI	Directional Motion History Image
MHI	Motion History Images
LBP	Local Binary Pattern
CRR	Correct recognition rate
SVM	Support Vector Machine
FTP	Fourier temporal pyramid
SGD	Stochastic Gradient Descent
HBRNN	Hierarchically bidirectional recurrent neural networks
TN	True Negative
TP	True Positive
FN	False Negative
FP	False Positive
IDT	Improved Dense Trajectory
MEI	Motion energy image

MHI	Motion history image
ReLU	Rectified Linear Unit
FC	Fully Connected
BN	Batch Normalization
NF	Number of Feature Maps
DMMs	Depth Motion Maps

LIST OF SYMBOLS

P_r	Precision
R_e	Recall
C_m	Centre of mass
D	Distance Signal
ξ^2	Variance
A	Binary silhouette
τ	Updating speed
ρ	Counter
α	Smoothing constant
V	Optical flow
H_a	Spatial boundary
g_c	Centre pixel of background subtraction image
g_p	Neighbourhood pixel of background subtraction image
O	Observation Sequence
Π	Initial State probability
A	Transition probability matrix
B	Emission probabilities
D-Score	Posterior probability scores for Dynamic stream
DF-Score	Posterior probability scores for Front Depth Stream
DS-Score	Posterior probability scores for Side Depth Stream
DT-score	Posterior probability scores for Top Depth Stream
$\psi(F_T)$	Feature Vector
S(t|d)	Ranking Function

$d*$	Single vector generated from frame sequence using rank pooling