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## LIST OF SYMBOLS AND ABBREVIATIONS

AAM	-	Active Appearance Model
ABPNN	-	Annealing Back Propagation Neural Network
ANN	-	Artificial Neural Networks
ArSL	-	Arabic Sign Language
ASL	-	American Sign Language
ASLLVD	-	American Sign Language Lexicon Video Dataset
ASLRC	-	Automatic Sign Language Recognition and Classification
AUSLAN	-	Australian Sign Language
BPaHMM	-	Bayesian Parallel Hidden Markov Model
BSL	-	Brazilian Sign Language
CDFD	-	Combined Discriminative Feature Detectors
CHMM	-	Coupled Hidden Markov Model
CNN	-	Convolutional Neural Networks
CSL	-	Chinese Sign Language
CSLR	-	Continuous Sign Language Recognition
CSR	-	Continuous Sentence Recognition
CRF	-	Conditional Random Field
DASL	-	Dictionary of American Sign Language
DDTW	-	Derivative Dynamic Time Warping
Dez	-	Designator
DIST-SBHMM	-	Discriminative State-Space Tying-Segmentally Boosted Hidden Markov Model
DNN	-	Deep Neural Network
DTW	-	Dynamic Time Warping
EDP	-	Enhanced Dynamic Programming
EM	-	Epenthesis Movements
FHMM	-	Factorial Hidden Markov Model
FSM	-	Finite State Machines
GB	-	Gesture Base
GMM	-	Gaussian Mixture Models
GR	-	Gesture Recognition

GRFNN	-	Gesture Recognition Fuzzy Neural Network
GSL	-	German Sign Language
GTHMM	-	Gesture Threshold Hidden Markov Model
HamNoSys	-	Hamburg Notation System
HCRF	-	Hierarchical Conditional Random Field
HMI	-	Human-Machine Interaction
HMM	-	Hidden Markov Model
HS	-	Hand Shape
HSV	-	Hue Saturation Value
IMU	-	Inertial Measurement Unit
IOHMM	-	Input / Output Hidden Markov Model
ISL	-	Indian Sign Language
ISR	-	Isolated Sign Recognition
KNN	-	K-Nearest Neighbor
LDCRF	-	Latent Dynamic Conditional Random Fields
LED	-	Light Emitting Diode
LMC	-	Leap Motion Controller
MAP	-	Maximum Posterior Estimation
MEC	-	Minimum Entropy Clustering
ML	-	Machine Learning
MLLR	-	Maximum Linear Likelihood Regression
MLP	-	Multi-Layered Perceptron
MLPNN	-	Multi-layered Perceptron Neural Network
NN	-	Neural Networks
PaHMM	-	Parallel Hidden Markov Model
PCA	-	Principal Component Analysis
PHMM	-	Parametric Hidden Markov Model
PSL	-	Polish Sign Language
RNN	-	Recurrent Neural Network
RVM	-	Relevance Vector Machine
SCRF	-	Segmental Conditional Random Field
SDGC	-	Supervised-Dynamic Gesture Classification
SDTW	-	Statistical Dynamic Time Warping

SIFT	-	Scale Invariant Feature Transform
Sig	-	Signation
SL	-	Sign Language
SLR	-	Sign Language Recognition
SMP-HMM	-	Subunit Multi-stream Parallel Hidden Markov Model
SOFM	-	Self Organizing Feature Map
SOM	-	Self Organizing Map
SRN	-	Simple Recurrent Network
SSGC	-	Supervised-Static Gesture Classification
SURF	-	Speeded Up Robust Feature
SU-F	-	Subunit Frames
SU-IMH	-	Subunit and Imagenet-Hand motion
SU-noST	-	Subunit without Spatial and Temporal Feature
SVM	-	Support Vector Machine
S/T	-	Spatial/Temporal
SW-1	-	Whole Sign-1
SW-2	-	Whole Sign-2
Tab	-	Tabula
TDNN	-	Time Delay Neural Network
THMM	-	Threshold Hidden Markov Model
TMA	-	Template Matching Algorithm
TMM	-	Transition Movement Model
TP	-	Temporal Position
TV	-	Temporal Velocity
UDGC	-	Unsupervised Dynamic Gesture Classification
USGC	-	Unsupervised Static Gesture Classification
WDTW	-	Weighted Dynamic Time Warping