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ACRONYMS

3D-CNN	3Dimensional Convolutional Neural Network
AAE	Adversarial Autoencoder
AAM	Active Appearance Model
ACO	Ant Colony Optimization
AFORET	Affinity-based Overlap Reduction Techniques
AMF	Adaptive Median Filter
ANN	Artificial Neural Networks
AR	Augmented Reality
ASM	Active Shape Model
AUs	Action Units
BF	Bilateral Filter
Bi-LSTM	Bidirectional Long Short-Term Memory
CAE	Convolutional Autoencoder
CAGR	Compound Annual Growth Rate
CART	Classification and Regression Trees
CK+	Extended Cohn-Kanade
CNN	Convolutional Neural Network
COVID-19	Coronavirus disease 2019
CSO	Cat Swarm Optimization
CSS	Cascading Style Sheets
CV	Computer Vision
CVPR	Computer Vision and Pattern Recognition
DCNN	Deep Convolutional Neural Network
DIKSHA	Digital Infrastructure for Knowledge Sharing
DL	Deep Learning
DSCSA	Deep Semi-supervised Convolutional Sparse Autoencoder
EC	Exclusion Criteria
E-content	Electronic Content
EEG	Electroencephalography

E-learning	Electronic Learning
EMG	Electromyography
EQ	Histogram Equalization
FACS	Facial Action Coding System
FER	Facial Expression Recognition
FNR	False Negative Rate
FPR	False Positive Rate
GANs	Generative Adversarial Network
GF	Gaussian Filter
GPUs	Graphics Processing Units
Grad-CAM	Gradient-weighted Class Activation Mapping
GSR	Galvanic Skin Response
HOG	Histogram of Oriented Gradients
HoG	Histogram of Oriented Gradients
HTML	Hypertext Markup Language
ICA	Independent Component Analysis
IDE	Integrated Development Environment
IoT	Internet of Things
JAFFE	Japanese Female Facial Expression
JAFFE	Japanese Female Facial Expression
KNN	K-Nearest Neighbor
LBP	Local Binary Patterns
LCT	Local Curvelet Transform
LDA	Linear Discriminant Analysis
LIME	Local Interpretable Model-agnostic Explanations
LSTM	Long Short-Term Memory
MF	Median Filter
MLP	Multi-Layer Perceptron
MLPNN	Multiple-Layer Perceptron Neural Network
MMH	Maximum Marginal Hyperplane
MSE	Mean Squared Error

NLG	Natural Language Generation
PBA	Population-based Augmentation
PBT	Population-based Training
PCA	Principal Component Analysis
PHP	Hypertext Preprocessor
PPG	Photoplethysmography
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSNR	Peak Signal Noise Ratio
PSO	Particle Swarm Optimization
QoE	Quality of Experience
QoS	Quality of Service
RAE	Recurrent Autoencoder
RF	Random Forest
R-FCN	Region-based Fully Convolutional Networks
RISE	Randomized Input Sampling for Explanation
RNNs	Recurrent Neural Network
ROC	Receiver Operating Characteristic
ROI	Region of Interest
RQ	Research Question
SHAP	SHapley Additive exPlanations
SIFT	Scale-Invariant Feature Transform
SLR	Systematic Literature Review
SSDs	Single Shot MultiBox Detector
SSIM	Structural Similarity Index
STEM	Science Technology Engineering Mathematics
SVM	Support Vector Machine
SWAYAM	Study Webs of Active Learning for Young Aspiring Minds
SWLDA	Stepwise Linear Discriminant Analysis
TEL	Technology-Enhanced Learning
TNR	True Negative Rate
TPR	True Positive Rate

TPUs	Tensor Processing Units
TRN	Temporal Relational Network
USD	United States dollar
VE	Variational Autoencoder
VGG	Visual Geometry Group
VR	Virtual Reality
XAI	Explainable AI
YOLO	You Only Look Once