# ABBREVIATIONS

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|---|---|
| DNA | Deoxyribose Nucleic acid |
| CNS | Central Nervous System |
| USB | Universal Serial bus |
| SPRT | Statistical pattern recognition techniques |
| NCC | Normalized Cross Correlation |
| MLP | Multi-Layer Perceptron |
| RBF | Radial Basis Function |
| RGB | Red Green Blue |
| LUV | Luminance Model with Uniform Chrominance Components U,V |
| HSV | Hue Saturation Value |
| HMMD | Hue-min-max-difference color space |
| CM | Color Moments |
| CCV | Color Coherence Vector |
| DCD | Dominant Color Descriptor |
| CLD | Color Layout Descriptor |
| CSD | Color Structure Descriptor |
| SCD | Scalable Color Descriptor |
| GLCM | Grey Level Co- occurrence Matrix |
| MRF | Markov Random Field |
| SAR | Simultaneous Auto-Regressive mode |
| FD | Fractal Dimension |
| FT | Fourier Transform |
| DCT | Discrete Cosine Transform |
| OLSR | Ordinary Least Squares Regression |
| MARS | Multivariate Adaptive Regression Splines |

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|---|---|
| LOESS | Locally Estimated Scatterplot Smoothing |
| KNN | K-Nearest Neighbour |
| LVQ | Learning Vector Quantization |
| SOM | Self-Organizing Map |
| LWL | Locally Weighted Learning |
| LASSO | Least Absolute Shrinkage and Selection Operator |
| LARS | Least-Angle Regression |
| CART | Classification and Regression Tree |
| ID3 | Iterative Dichotomiser 3 |
| CHAID | Chi-squared Automatic Interaction Detection |
| AODE | Averaged One-Dependence Estimators |
| BBN | Bayesian Belief Network |
| BN | Bayesian Network |
| EM | Expectation Maximisation |
| RBFN | Radial Basis Function Network |
| DBM | Deep Boltzmann Machine |
| DBN | Deep Belief Networks |
| CNN | Convolutional Neural Network |
| PCA | Principal Component Analysis |
| PCR | Principal Component Regression |
| PLSR | Partial Least Squares Regression |
| MDS | Multidimensional Scaling |
| LDA | Linear Discriminant Analysis |
| MDA | Mixture Discriminant Analysis |
| QDA | Quadratic Discriminant Analysis |
| FDA | Flexible Discriminant Analysis |
| ASM | Angular Second Moment |
| SST | Simple Statistical Transformation |
| TS | Texture Spectrum |
| CCM | Color Co-occurrence Matrix |

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|---|---|
| HIS | Hue intensity saturation |
| CIE | International Commission on Illumination |
| NDI | Normalized Difference Index |
| HTD | Homogeneous Texture Descriptor |
| EHD | Edge Histogram Descriptor |
| PBD | Perceptual Browsing Descriptor |
| MRI | Magnetic Resonance Imaging |
| CSS image | Curvature Scale Space |
| MPEG-7 | Moving Picture Expert Group |
| PSO | Particle Swarm Optimization |
| MMC | Move Median Center |
| LPGF | Low-Pass Gaussian Filter |
| HPGF | High-Pass Gaussian Filter |
| CT | Computed Tomography |
| SFFS | Sequential Forward Floating Selection |
| EM | Expectation Maximisation |
| MSA | Multiple Sequence Alignments |
| NH | Nearest Hit |
| NM | Nearest Miss |
| IDM | Inverse Differential Moment |
| LVQ | Linear Vector Quantification |
| DAN2 | Dynamic Architecture for ANN |
| ASVPV | Angulation between Secondary Veins and Primary Veins |
| VADSV | Variation in Divergence of Secondary Veins |
| SVM | Support Vector Machines |
| MA | Mean Angle |
| MDM-A | Average Multidimensional Distance Matrix |
| FLAVIA | Swedish Leaf Image Dataset |
| SLID | Survey of Labor and Income Dynamics Dataset |

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|---|---|
| NCS-FFNN | Normalized Cubic Spline-Feed Forward Neural Network |
| DCT | Discrete Cosine Transform |
| ROI | Region of Interest |
| FKNN | Fuzzy K-Nearest Neighbor |
| CASIA-IrisV3 | Chinese Academy of Sciences Iris DatsetV3 |
| MDM | Multi-scale Distance Matrix |
| LDC | Linear discriminant Classifier |
| NFC | Neuro-Fuzzy Controller |
| MLP | Multi-Layered Perceptron |
| GTFD | Gabor Texture Feature Dataset |
| CSV | Comma Separated Values |
| OOB | Out Of Bag |
| VIMP | Variable Importance |
| RF | Random Forest |
| UCI | University of California, Irvine |
| R$^{TM}$ | R sensor (Trade Mark of Sony) |
| TFD | Texture Feature Dataset |
| TFDD | Texture Feature Dataset for Dorsal side |
| TFDV | Texture Feature Dataset for Ventral side |
| TFDDV | Texture Feature Dataset for Dorsal-Ventral combined |
| ITDD | Image Texture Dorsal Dataset |
| ITVD | Image Texture Ventral Dataset |
| CITDVD | Combined Image Texture Dorsal-Ventral Dataset |
| ISDD | Image Statistical Dorsal Dataset |
| ISVD | Image Statistical Ventral Dataset |
| CISDVD | Image Statistical Dorsal-Ventral Dataset |

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|---|---|
| N-S | North-South |
| E-W | East-West |
| ITDD | Image Texture Dorsal Dataset |
| ITVD | Image Texture Ventral Dataset |
| CIITDVD | Combined Image Texture Dorsal-Ventral Dataset |
| AR | Auto Regression |
| SFD | Statistical Feature Dataset |
| ISDD | Image Statistical Dorsal Dataset |
| ISVD | Image Statistical Ventral Dataset |
| CIISDVD | Combined Image Statistical Dorsal-Ventral Dataset |
| HC | Hill Climbing |
| CFS | Correlation Based Feature Selection |
| BFS | Best First Search |
| PLS | Partial Least Square |
| PSO | Particle Swarm Optimization |
| PSO-CFS | Particle Swarm Optimization –Correlation Based Feature Selection |
| PDFS | PSO based Dorsal Feature Subset |
| PVFS | PSO based Ventral Feature Subset |
| PNN | Probabilistic Neural Network |