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LIST OF ABBREVIATIONS

AADHAR	Aam Aadmi Ka Adhikar
ACK	Acknowledgment
ATM	Automated Teller Machine
CASIA	Chinese Academy of Sciences Institute of Automation
CER	Crossover Error Rate
CIA	Central Intelligence Agency
CHAP	Challenge-Handshake Authentication Protocol
CHT	Circular Hough Transform
CV	Constant Value
DARPA	Defense Advanced Research Projects Agency
DCT	Discrete Cosine Transform
DDWT	Double Density Wavelet Transform
DFT	Discrete Fourier Transforms (DFTs)
DLDA	Direct Linear Discriminant Analysis
DNA	Deoxyribo Nucleic Acid
DOA	Digital Object Architecture
DTCWT	Dual Tree Complex Wavelet Transform
DWT	Discrete Wavelet Transform
EAP	Extensible Authentication Protocol
EER	Equal Error Rate
EIS	Enterprise Information Systems
EL	Eyelid localization
EMD	Empirical Mode Decomposition

FAR	False Acceptance Rate
FDI	Federal Bureau of Investigation
FER	Failure to Enrol Rate
FMR	False Match Rate
FNMR	False Non-match Rate
FPGAs	Field Programmable Gate Arrays
FPC	Fourier Phase Code
FRR	False Rejection Rate
FTA	Failure to Acquire
FTC	Failure to Capture Rate
GLCM	Gray-level Co-occurrence Matrix
GUI	Graphical User Interface
HD	Hamming Distance
HTTP	HyperText Transmission Protocol
ICA	Independent Component Analysis
ICE	Iris challenge evaluation (ICE)
ID	Identity cards
IXM	IDENT Exchange Messages
J2EE	Java 2 Enterprise Edition
JDBC API	Java Database Connectivity Application Programming Interface
JMS	Java Message Service
KBBC	Key Binding Biometric Cryptosystem
KDC	Key Distribution Centre
KPCA	Kernel Principal Component Analysis
LBP	Local binary patterns

LDA	Linear Discriminant Analysis
LFC	Local feature based classifiers (LFC)
LID	Light-Weight Identity
MATLAB	Matrix Laboratory
MEMD	Modified Empirical Mode Decomposition
M-ICA	Multi-resolution Independent Component Identification
MIT	Massachusetts Institute of Technology
MMU	Multimedia University
NAK	Negative Acknowledgment
NEO	Noise by Eyelids
NIFT	Non-Invertible Feature Transformation
NIR	Near InfraRed
NLO	Noise by Eyelashes
NLR	Noise by Lighting Reflections
NMB	Noise by motion blurred irises
NOI	Noise by out-of iris images
NOA	Noise by off-angle iris
NPF	Noise by poor focused images
NPI	Noise by partial
NSR	Noise by Specular Reflection
NSTC	National Science and Technology Council
NTLM	NT LAN Manager
OASIS	Online Applicant Status and Information System
PAP	Password Authentication Protocol
PIN	Personal Identification Number

PPP	Point-to-Point Protocol
RADIUS	Remote Authentication Dial-In User Service
RAIC	Restricted Area Identity Card (RAIC)
RGB	Red (R), Green (G), Blue (B)
ROC	Receiver Operating Characteristic or Relative Operating Characteristic
SCOE	Sinhgad College of Engineering
SIFT	Scale-invariant feature transform
SPAP	Secure Password Authentication Protocol
SSL	Secure Sockets Layer
TGS	Ticket Granting Service
TGT	Ticket Granting Ticket
TLS	Transport Layer Security
UBIRIS	University of Beira Interior IRIS
UID	Unique Identification Number
UPOL	Univerzita Palackého v Olomouci
URI	Uniform Resource Identifier
WIA	Windows Image Acquisition
WVU	West Virginia University
XRI	Extensible Resource Identifiers
YCbCr	Green (Y), Blue (Cb), Red (Cr)