

2025 International Conference of the Biometrics Special Interest Group (BIOSIG 2025)

**Darmstadt, Germany
25-26 September 2025**

IEEE Catalog Number:
ISBN:

CFP2535S-POD
979-8-3315-0316-1



Copyright © 2025, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP2535S-POD
ISBN (Print-On-Demand):	979-8-3315-0316-1
ISBN (Online):	979-8-3315-0315-4

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone:	(845) 758-0400
Fax:	(845) 758-2633
E-mail:	curran@proceedings.com
Web:	www.proceedings.com

TABLE OF CONTENTS

Normalization Refinement for Occluded Gait Recognition	1
<i>Haruya Nagasawa, Fumito Shinmura, Daigo Muramatsu</i>	
Improved Off-angle Iris segmentation using a novel distance-based loss function	7
<i>Jitendra Sai Kota, Mahmut Karakaya</i>	
GANDiffKids: Benchmarking Face Recognition for Children on Synthetic Data	12
<i>Samyak Jain, Sam L. Ahier, Pietro Melzi, Ruben Tolosana, Ruben Vera-Rodriguez, Christian Rathgeb</i>	
Hash-based iris template protection using maximum entropy binary codes and CNNs	17
<i>Osman Demir, Thomas Schuth, Marta Gomez-Barrero</i>	
Applicability Evaluation of Synthetic Images for Performance Testing via Quality and Similarity Assessment	22
<i>Hajime Nada, Yoshimitsu Ogawa, Hidetsugu Uchida, Tetsushi Ohki, Shigefumi Yamada, Kazuhiko Sumi</i>	
SHAPing Latent Spaces in Facial Attribute Classification Models	30
<i>Leonardo Ferreira, Mafalda Oliveira, Tiago Gonçalves, Rafael M. Mamede, Pedro C. Neto Ana F. Sequeira</i>	
FaceQSORT: a Comprehensive Evaluation of Different Appearance Features	37
<i>Robert Jöchl, Andreas Uhl</i>	
Single-Instance Multi-Sample Fusion in Deep Fingerprint Fuzzy Vault	42
<i>Hans Geisner, Christina Kihn, Christian Rathgeb</i>	
Biometric Bound Credentials for Age Verification	48
<i>Norman Poh, Daryl Burns</i>	
Deep Learning-Based Approaches for Contactless Fingerprints Segmentation and Extraction	53
<i>M.G. Sarwar Murshed, Syed Konain Abbas, Sandip Purnapatra, Daqing Hou, Faraz Hussain</i>	
Exploring Complementarity and Explainability in CNNs for Periocular Verification Across Acquisition Distances	59
<i>Fernando Alonso-Fernandez, Kevin Hernandez Diaz, Jose M. Buades, Kiran Raja, Josef Bigun</i>	
Foundation Model Guidance for Tattoo Retrieval	66
<i>Philipp Liehmann, Lázaro J. González-Soler, Christoph Busch</i>	
Transformers for Iris Presentation Attack Detection: Effectiveness and Behavior under Image Compression	72
<i>Rocco Albano, Filippo Battaglia, Alessandro Gnutti, Emanuele Maiorana, Fabrizio Guerrini Giuseppe Campobello, Pierangelo Migliorati, Patrizio Campisi</i>	
SynthFace: Generating Secure Talking Avatars from Controlled Target Faces	79
<i>Kirandeep Kaur, Ansh Agrawal, Harkeerat Kaur, Pritee Khanna</i>	
Secure Multi-Party Homomorphic Encryption for Post-Quantum Biometric Recognition	86
<i>Harald H. Paaske, Florian Bayer, Christian Rathgeb</i>	
Deep Learning-Based Fingerprint Quality Assessment	92
<i>Jannis Priesnitz, Rudolf Haraksim, Laurent Beslay</i>	

Pilot post mortem fingerprinting using electronic devices	98
<i>Martin Drahanský, Jaromír Štěpánek, Tomáš Vokálek, Klára Neureutterová</i>	
Online Augmentation for Presentation Attack Detection on ID Cards	103
<i>Félix Fernandez, Juan M. Espín, Mario Nieto, Juan E. Tapia</i>	
Presentation Attack Detection Using Time-of-Flight-Based rPPG and Depth Features	110
<i>Markus Rohde, Ralph Breithaupt, Gerd Nolden, Stephan Bergmann, Robert Lange</i>	
SCDF: A Speaker Characteristics DeepFake Speech Dataset for Bias Analysis	115
<i>Vojtěch Staněk, Karel Srna, Anton Firc, Kamil Malinka</i>	