

2022 International Workshop on Biometrics and Forensics (IWBF 2022)

**Salzburg, Austria
20 – 21 April 2022**



**IEEE Catalog Number: CFP2208U-POD
ISBN: 978-1-6654-6963-0**

**Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc.
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:	CFP2208U-POD
ISBN (Print-On-Demand):	978-1-6654-6963-0
ISBN (Online):	978-1-6654-6962-3

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

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

BA-LR: Binary-Attribute-Based Likelihood Ratio Estimation for Forensic Voice Comparison	1
<i>Imen Ben Amor, Jean-Francois Bonastre</i>	
Improved Homomorphically Encrypted Biometric Identification Using Coefficient Packing	7
<i>Pia Bauspieb, Jonas Olafsson, Jascha Kolberg, Pawel Drozdowski, Christian Rathgeb, Christoph Busch</i>	
Mobile Passive Authentication Through Touchscreen and Background Sensor Data.....	13
<i>Giuseppe Stragapede, Ruben Vera-Rodriguez, Ruben Tolosana, Aythami Morales, Alejandro Acien, Gael Le Lan</i>	
Face Recognition in Children: A Longitudinal Study	19
<i>Keivan Bahmani, Stephanie Schuckers</i>	
Exploring Quality Scores for Workload Reduction in Biometric Identification	25
<i>D. Osorio-Roig, T. Schlett, C. Rathgeb, J. Tapia, C. Busch</i>	
Kinship Verification from Ear Images: An Explorative Study with Deep Learning Models	31
<i>Grega Dvorsak, Ankita Dwivedi, Vitomir Struc, Peter Peer, Ziga Emersic</i>	
Morphing Attack Potential	37
<i>Matteo Ferrara, Annalisa Franco, Davide Maltoni, Christoph Busch</i>	
Are Average Faces Master Faces?.....	43
<i>Andre Dorsch, Christian Rathgeb, Mathias Ibsen, Christoph Busch</i>	
Dual-Stream Temporal Convolutional Neural Network for Voice Presentation Attack Detection	49
<i>Lazaro J. Gonzalez-Soler, Marta Gomez-Barrero, Madhu Kamble, Massimiliano Todisco, Christoph Busch</i>	
CNN Based Finger Region Segmentation for Finger Vein Recognition	55
<i>Bernhard Prommegger, Dominik Sollinger, Georg Wimmer, Andreas Uhl</i>	
Privacy-Preserving Convolutional Neural Networks Using Homomorphic Encryption	61
<i>Tatjana Wingarz, Marta Gomez-Barrero, Christoph Busch, Mathias Fischer</i>	
Writer Recognition Using Off-Line Handwritten Single Block Characters	67
<i>Adrian Leo Hagstrom, Rustam Stanikzai, Josef Bigun, Fernando Alonso-Fernandez</i>	

Author Index