2026 11th International Conference on Frontiers of Signal Processing (ICFSP 2026)

Toulouse, France
10-12 June 2026

IEEE Catalog Number: CFP26J22-POD
ISBN: 979-8-3195-3668-6

IEEE
Advancing Technology for Humanity

Copyright © 2026, 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:	CFP26J22-POD
ISBN (Print-On-Demand):	979-8-3195-3668-6
ISBN (Online):	979-8-3195-3667-9

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

Robustness and Reliability Evaluation of Dermatological Image Classifiers Under Realistic Image Corruptions 1
Ahmed H. Alkenani, Mariam S. Asker, Hanan K. Almukhadhab, Deema I. Albatli, Razan S. Alenazi

Machine Learning for Firing Pin and Breech Face Impression Classification on Cartridge Case Primers 10
Eric Myles Panganiban, Enrico Absin

Efficient Real-Time Facial Emotion Recognition via Optimized ResNet18 Feature Extraction 15
Hamza Graïn, Youssef Hayani, Yanis Blot-El Mazouzi, Amadou Diallo, Hamza Bayd, Imene Sekkiou Baptiste Magnier

Entreacte Inter-Omnia-Glypha Computer Vision & OCR Method 20
Luís Homem

Semi-Supervised Auto-White Balancing Method for RGB-IR Images Based on IR-Guidance 30
Katarina Tolja, Donik Vršnak, Marko Subašić, Sven Lončarić

Interpretable Compression of Multivariate Time Series via Geometric Volume Compression 37
Samir Brahim Belhaouari, Khatereh Mohammadi, Ismaël Belhaouari, Yunis Carreon Kahalan

ROI-Guided Image Coding in JPEG XL 41
Hui Wang, Zixi Luo, Claire Mantel, Søren Forchhammer

Variational Inference for a Dynamic Mixture Model 46
San Gultekin

Learning-Free Image Similarity via Patch-Based Normalized Information Distance 51
Iker Gondra

Upscaling Human Face Geometry Images Through Super-Resolution 56
Yusuf Kızılkaya, Uluğ Bayazıt

Automated Ceramic-Glass Separation Using a Hyperspectral Camera 61
Ane Moraza Azpiazu, Fátima A. Saiz Álvaro, Hugo Álvarez Ponga

Tiny-Cc-Detector: Localizing Color Charts Using Small Convolutional Neural Networks 66
Roko Franetović, Marko Subašić

Real-Time Quality-Aware Embedded Signal Processing for Respiratory and Cardiac Peak Detection in Bioimpedance 71
Toms Račinskis, Armands Ancāns, Sandis Kagis, Klara Kuzņecova, Modris Greitāns

Uncovering Hand Tremor Patterns in Individuals with Parkinson's Disease Using Matrix Profile 76
Ariana Moura Cabral, Nicoly Augusta S. Quezada dos Santos, Bruno Lima Pessôa Clarissa Cardoso dos Santos Couto Paz, Eduardo Rocon, Adriano de Oliveira Andrade

Bridging Silence: Visual-Only Hindi Speech Reconstruction Using Multimodal AVSR 81
Meera Reji, Meeraja K, Meghana Aithal, Megha Jyothsna Sathian, Shylaja S.S.

Uplink Sum-Rate Optimization in RIS-Assisted NOMA Systems with Spatial Correlation 86
Luca Pallotta, Piergiuseppe Di Marco, Vincenzo Fiumara

Detection, Classification, and Alert Generation for DDoS Attacks in Software-Defined Networks (SDN) Using Machine Learning 91
Mamadou Bailo Bah, Abdoulaye Diallo, Chérif Diallo

Sound Event Candidate Generation by Rule-Based Signal Processing: A Systematic Comparison in Turkey Barn Audio 101
Leon Grude, Jessica Raabe, Gurubaran Raveendran, Thomas Bartels, Helen Schomburg, Kai Homeyer Martin Streitenberger, Jörn Ostermann

Accelerometer-Based Signal Processing for Objective Assessment of Wrist Rigidity in Parkinson's Disease 108
Camille Marques Alves, Yann Morere, Adriano de Oliveira Andrade