Tuesday, February 20, 2018

Tuesday 09:00 – 12:30
Tutorial I:
BIOMETRIC SPOOFING AND ANTI-SPOOFING: PRESENTATION ATTACK DETECTION: *Sébastien Marcel*

Tutorial II:
HUMAN-DEVICE INTERACTION FOR COGNITIVE BEHAVIORAL BIOMETRICS: TRENDS, SCENARIOS AND APPLICATIONS: *Javier Ortega-Garcia*

Tuesday 14:00 – 17:30
Tutorial III:
FINGERPRINT PRESENTATION ATTACKS DETECTION: LESSONS LEARNED AND A ROADMAP TO THE FUTURE: *Gian Luca Marcialis*

Tutorial IV:
DEEP LEARNING IN FACE RECOGNITION: *Shiguang Shan and Arnold Wiliem*

Wednesday, February 21, 2018

Boulevard Room 2/3
Mantra-on-View Hotel

Wednesday 08:30 – 09:00
Welcome by Chairs

Wednesday 09:00 – 10:00
Keynote Lecture – I: Fingermarks: Whodunnit? [Session Chair: Javier Ortega-Garcia]
IAPR Distinguished Keynote Speaker
Anil K. Jain
Professor
Michigan State University, USA

Wednesday 10:00 – 10:30
COFFEE BREAK

Boulevard Room 2/3
Mantra-on-View Hotel

Wednesday 10:30 – 12:00
Oral I: Fingerprint Analysis and Synthesis [Session Chair: Christian Rathgeb]

O1: 10:30 – 10:45: Fingerprint Distortion Rectification using Deep Convolutional Neural Networks
        Ali Dabouei; Hadi Kazemi; Seyed Mehdi Iranmanesh; Nasser Nasrabadi; Jeremy Dawson

O2: 10:45 – 11:00: Robust Minutiae Extractor: Integrating Deep Networks and Fingerprint Domain Knowledge
        Dinh-Luan Nguyen; Anil Jain; Kai Cao

O3: 11:00 – 11:15: Comparative Study of Digital Fingerprint Quality Assessment Metrics
        Zhigang Yao; Jean-Maris Le Bars; Christophe Charrier; Christophe Rosenberger

O4: 11:15 – 11:30: Filter Design Based on Spectral Dictionary for Latent Fingerprint Pre-Enhancement
        Watcharapong Chaidee; Kittipol Horapong; Vutipong Areekul

O5: 11:30 – 11:45: Fingerprint Synthesis: Evaluating Fingerprint Search at Scale
        Kai Cao; Anil Jain

O6: 11:45 – 12:00: Evolutionary Methods for Generating Synthetic MasterPrint Templates: Dictionary Attack in Fingerprint Recognition
        Aditi Roy; Nasir Memon; Arun Ross

Wednesday 12:00 – 13:30
LUNCH BREAK

Boulevard Room 2/3
Mantra-on-View Hotel

Wednesday 13:30 – 15:00
Oral II: Biometrics Security and Privacy [Session Chair: Wai-Kin Adams Kong]

O7: 13:30 – 13:45: Hierarchical Multi-class Iris Classification for Liveness Detection
        Zihui Yan; Lingxiao He; Man Zhang; Zhenan Sun; Tieniu Tan

O8: 13:45 – 14:00: Securing Minutia Cylinder Codes for Fingerprints through Physically Unclonable Functions: An Exploratory Study
        Rosario Arjona; Miguel Angel Prada; Iluminada Baturone; Arun Ross

O9: 14:00 – 14:15: Protecting Your Faces: MeshFaces Generation and Removal via High-order Relation-preserving CycleGAN
        Zhihang Li; Yibo Hu; Man Zhang; Min Xu; Ran He

O10: 14:15 – 14:30: De-mark GAN: Removing Watermark with Generative Adversarial Network
        Jinlin Wu; Hailin Shi; Zhen Lei; Stan Li; Shu Zhang

O11: 14:30 – 14:45: On Effectiveness of Anomaly Detection Approaches against Unseen Presentation Attacks in Face Anti- Spoofing
        Olegs Nikisins; Amir Mohammadi; André Anjos; Sebastien Marcel

O12: 14:45 – 15:00: Semi-Adversarial Networks: Convolutional Autoencoders for Imparting Privacy to Face Images
        Vahid Mirjalili; Sebastian Raschka; Anoop Namboodiri; Arun Ross

Wednesday 15:00 – 15:30
COFFEE BREAK

Boulevard Room 2/3
Mantra-on-View Hotel

Wednesday 15:30 – 16:30
Oral III: Soft Biometric Attributes and Forensics [Session Chair: Vutipong Areekul]

O13: 15:30 – 15:45: Two-Stream Part-based Deep Representation for Human Attribute Recognition
Rao Muhammad Anwer; Fahad Shahbaz Khan; Jorma Laaksonen

O14: 15:45 – 16:00: Fine-grained Multi-Attribute Adversarial Learning for Face Generation of Age, Gender and Ethnicity
LiPeng Wan; Jun Wan; Yi Jin; Zichang Tan; Stan Li

O15: 16:00 – 16:15: Predicting Eye Color from Near Infrared Iris Images
Denton Bobeldyk; Arun Ross

O16: 16:15 – 16:30: A Meta-Recognition Based Skin Marks Matching Algorithm with Feature Fusion for Forensic Identification
Peicong Yu; Wai-Kin Adams Kong

Boulevard Room 1
Mantra-on-View Hotel

Wednesday 16:45 – 18:00
Poster Session I
Meet the Authors: All oral presentations on Wednesday will have a corresponding poster presentation in this session

Wednesday 18:00 – 19:30
RECEPTION

Thursday, February 22, 2018

Boulevard Room 2/3
Mantra-on-View Hotel

Thursday 08:45 – 09:00
Welcome by Chairs

Thursday 09:00 – 10:00
Keynote Lecture – II: The Business Use of Biometrics in the Australian Passport Office [Session Chair: Brian Lovell]
David Chadwick
Director – Passport Standards and Biometrics Section
Australian Passport Office, Australia

Thursday 10:00 – 10:30
COFFEE BREAK

Boulevard Room 2/3
Mantra-on-View Hotel

Thursday 10:30 – 12:00
Oral IV: Face Recognition [Session Chair: Stan Li]

O17: 10:30 – 10:45: Metadata-based Feature Aggregation Network for Face Recognition
Nishant Sankaran; Sergey Tulyakov; Srirangaraj Setlur; Venu Govindaraju

O18: 10:45 – 11:00: Conformal Mapping of A 3D Face Representation onto a 2D Image for CNN Based Face Recognition
Josef Kittler; Willem P Koppen; Philipp Kopp; Patrik Huber; Matthias Rätsch

O19: 11:00 – 11:15: Boosting Face in Video Recognition via CNN based Key Frame Extraction
Xuan Qi; Chen Liu; Stephanie Schuckers

O20: 11:15 – 11:30: Improving 2D Face Recognition via Discriminative Face Depth Estimation
Jiyun Cui; Hao Zhang; Hu Han; Shiguang Shan; Xilin Chen

O21: 11:30 – 11:45: Fully Associative Patch-based 1-to-N Matcher for Face Recognition
Lingfeng Zhang; Ioannis Kakadiaris

O22: 11:45 – 12:00: IARPA Janus Benchmark — C: Face Dataset and Protocol
Brianna Maze; Nathan D Kalka; James Duncan; Anil Jain; Jocelyn Adams; Tyler Niggel; Patrick Grother; Tim Miller; Jordan Cheney; Charles Otto

Thursday 12:00 – 13:30
LUNCH BREAK

Boulevard Room 2/3
Mantra-on-View Hotel

Thursday 13:30 – 15:00
Oral V: Multispectral Face and Ocular Analysis [Session Chair: Clinton Fookes]

O23: 13:30 – 13:45: Deep Cross Polarimetric Thermal-to-visible Face Recognition
   Seyed Mehdi Iranmanesh; Ali Dabouei; Hadi Kazemi; Nasser Nasrabadi

O24: 13:45 – 14:00: TV-GAN: Generative Adversarial Network Based Thermal to Visible Face Recognition
   Teng Zhang; Arnold Wiliem; Siqi Yang; Brian Lovell

O25: 14:00 – 14:15: The Dark Side of the Face: Exploring the Ultraviolet Spectrum for Face Biometrics
   Dirk Siegmund; Timotheos Samartzidis; Michael Gödde; Andreas Braun; Arjan Kuijper

O26: 14:15 – 14:30: Multi-spectral Iris Segmentation in Visible Wavelengths
   Torsten Schlett; Christian Rathgeb; Christoph Busch

O27: 14:30 – 14:45: Robust Multi-Spectral Imaging for Ocular Biometric
   Narayan Vetrekar; Raghavendra Ramachandra; Kiran Raja; Rajendra Gad; Christoph Busch

O28: 14:45 – 15:00: Detection of Glasses in Near-infrared Ocular Images
   Pawel Drozdowski; Florian Struck; Christian Rathgeb; Christoph Busch

Thursday 15:00 – 15:30
COFFEE BREAK

Boulevard Room 2/3
Mantra-on-View Hotel

Thursday 15:30 – 16:30
Oral VI: Child Biometrics and Fusion [Session Chair: Nasser Nasrabadi]

O29: 15:30 – 15:45: Verifying the Newborns without Infection Risks using Contactless Palmprints
   Raghavendra Ramachandra; Kiran Raja; Sushma Venkatesh; Sneha Hegde; Sridhar Dandappanavar; Christoph Busch

O30: 15:45 – 16:00: The Impact of Age and Threshold Variation on Facial Recognition Algorithm Performance using Images of Children
   Dana Michalski

O31: 16:00 – 16:15: Longitudinal Study of Child Face Recognition
   Debayan Deb; Neeta Nain; Anil Jain

O32: 16:15 – 16:30: Context-Aware Fusion for Continuous Biometric Authentication
   Divya Sivasankaran; Mona Ragab; Terence Sim; Yair Zick

Boulevard Room 1
Mantra-on-View Hotel

Thursday 16:45 – 18:00
Poster Session II
Meet the Authors: All oral presentations on Thursday will have a corresponding poster presentation in this session

Thursday 18:30-22:30
BANQUET

Friday, February 23, 2018

Boulevard Room 2/3
Mantra-on-View Hotel

Friday 08:45 – 09:00
Welcome by Chairs

Friday 09:00 – 10:00
Keynote Lecture – III: Delivering Efficiencies in Health Care and Manufacturing [Session Chair: Josef Kittler]
Svetha Venkatesh
Professor
Deakin University, Australia

Friday 10:00 – 10:30
COFFEE BREAK

Friday 10:30 – 12:00
Oral VII: Novel Biometric Features and Cues [Session Chair: Sebastien Marcel]

O33: 10:30 – 10:45: Person Recognition Beyond the Visible Spectrum: Combining Body Shape and Texture from mmW images
Ester Gonzalez-Sosa; Rubén Vera Rodríguez; Julian Fierrez; Vishal Patel

O34: 10:45 – 11:00: Improving Face Recognition by Exploring Local Features with Visual Attention
Yichun Shi; Anil Jain

O35: 11:00 – 11:15: Multifactor User Authentication with In-Air-Handwriting and Hand Geometry
Duo Lu; Yuli Deng; Adel Alshamrani; Dijiang Huang

O36: 11:15 – 11:30: Style Signatures to Combat Biometric Menagerie in Stylometry
Kalaivani Sundararajan; Tempestt J Neal; Damon Woodard

O37: 11:30 – 11:45: Exploiting Linguistic Style as a Cognitive Biometric for Continuous Verification
Tempestt J Neal; Kalaivani Sundararajan; Damon Woodard

O38: 11:45 – 12:00: Evaluation of PPG Biometrics for Authentication in Different States
Umang N Yadav; Sherif Seha; Dimitris Hatzinakos

Friday 12:00 – 13:30
LUNCH BREAK

Friday 13:30 – 15:15
Oral VIII: Other Topics [Session Chair: Arun Ross]

O39: 13:30 – 13:45: Shedding Light on the Veins - Reflected Light or Transillumination in Hand-Vein Recognition
Christof Kauba; Andreas Uhl

O40: 13:45 – 14:00: Multi-sample Compression of Iris Images using High Efficiency Video Coding
Christian Rathgeb; Torsten Schlett; Nicolas Buchmann; Harald Baier; Christoph Busch

O41: 14:00 – 14:15: LivDet 2017 Fingerprint Liveness Detection Competition 2017
Gian Luca Marcialis

O42: 14:15 – 14:30: SSBC 2018: Sclera Segmentation Benchmarking Competition
Abhijit Das; Umapada Pal; Miguel A. Ferrer; Michael Blumenstein; Dejan Štepec; Peter Rot; Žiga Emeršič; Vitomir Štruc; Peter Peer

Previously Published Papers

O43: 14:30 – 14:40: Gait Recognition Based on the Golden Ratio [Journal: EURASIP Journal on Image and Video Processing]
Yaling Liang; Chang-Tsun Li; Yu Guan; Yongjian Hu

O44: 14:40 – 14:50: Biometric-Based Cryptography for Digital Content Protection Without Any Key Storage [Journal: Multimedia Tools and App]
Gaurang Panchal; Debasis Samanta; Subhas Barman

O45: 14:50 – 15:00: Towards More Accurate Iris Recognition using Cross-spectral Matching [Journal: IEEE Transactions on Image Processing]
N. Pattabhi Ramiah; Ajay Kumar

O46: 15:00 – 15:10: Computer Face-Matching Technology Using Two-Dimensional Photographs Accurately Matches the Facial Gestalt of Unrelated Individuals with the Same Syndromic Form of Intellectual Disability [Journal: BMC Biotechnology]
Tracy Dudding-Byth; Anne Baxter; Elizabeth G. Holliday; Anna Hackett; Sheridan O'Donnell; Susan M. White; John Attia; Han Brunner; Bert de Vries; David Koolen; Tjitske Kleefstra; Seshika Ratwatte; Carlos Riveros; Steve Brain; Brian C. Lovell

Friday 15:15 – 15:45
COFFEE

Friday 15:15 – 16:30
Poster Session III
Meet the Authors: All oral presentations on Friday will have a corresponding poster presentation in this session

Friday 16:30 – 17:00
Closing Comments and Group Photograph