SÃO JOSÉ DOS CAMPOS
SIBGRAPI '16
XXIX CONFERENCE ON GRAPHICS, PATTERNS AND IMAGES

Workshop on Face Processing Applications (WFPA) – Schedule

Invited Talk
Thursday (Oct, 6)
14:00 – 14:45

WFPA.IT.1 - **Facial Composites: A Successful Collaboration between Technology and Psychology**
Dr. Josh Davis (Dept. of Psychology and Counselling, Univ. of Greenwich, London, UK)
Abstract: Facial composites are created by witnesses unfamiliar with the perpetrator of a crime, with the aim of recognition by witnesses familiar with the offender. Computerised facial composite systems were originally feature-based in nature, and required the witness to verbally provide a description of individual facial features, select features from databases and to assemble them into a whole face composite. These processes are cognitively demanding, and not surprisingly the final composites produced were often a poor likeness. Drawing on psychological principles that faces are primarily processed as a Gestalt, and that recognition is more accurate than recall, modern holistic facial composite systems exploit these mechanisms, and often result in far more recognisable composites, increasing suspect identifications. Witness interviewing methods and various post-composite-construction technological techniques, also drawing on psychology can further enhance the likelihood of a facial composite being recognised, and the suspect subsequently being identified by the composite-creating witness from a line-up (identity parade). These procedures are being incorporated into worldwide police practice, and demonstrate that for face processing technology to be successfully implemented in the workplace, the design of the interface between the human and the machine must be a priority in system development.

Oral Presentation Session – Computer Vision, Biometrics and Anthropometry
Thursday (Oct, 6)
14:45 – 15:45

WFPA.OP.1 - Face Identification in Large Galleries
Rafael Vareto (UFMG), Filipe Costa (UFMG), William Schwartz (UFMG)

WFPA.OP.2 - NosePose: A competitive, Landmark-Free Methodology for Head Pose Estimation in the Wild
Flávio Zavan (UFPR), Antônio Nascimento (UFPR), Olga Bellon (UFPR), Luciano Silva (UFPR)

WFPA.OP.3 - Construction of a Spatio-Temporal Face Atlas: Experiments using Down Syndrome Samples
Igor Xavier (FEI), Gilson Giraldi (LNCC), Stuart Gibson (University of Kent), Gilka Gattas (USP), Daniel Rueckert (Imperial College London), Carlos Thomaz (FEI)

WFPA.OP.4 - Follow that Nose: Tracking Faces based on the Nose Region and Image Quality Feedback
Luan Silva (UFPR), Flávio Zavan (UFPR), Olga Bellon (UFPR), Luciano Silva (UFPR)

Oral Presentation Session – Pattern Recognition
Thursday (Oct, 6)
16:15 – 17:15

WFPA.OP.5 - Ranking Eigenfaces Through Adaboost and Perceptron Ensembles
Tiene Filisbino (LNCC), Gilson Giraldi (LNCC), Carlos Thomaz (FEI)

WFPA.OP.6 - Landmark-Free Smile Intensity Estimation
Júlio Batista (UFPR), Olga Bellon (UFPR), Luciano Silva (UFPR)

WFPA.OP.7 - Supervised Methods for Classifying Facial Emotions
Francisco Paiva (FEEC-UNICAMP), Paula Costa (FEEC-UNICAMP), José Martino (FEEC-UNICAMP)

WFPA.OP.8 - An Approach for Brazilian Sign Language Recognition based on Facial Expression and k-NN Classifier
Tamires Rezende (UFMG), Cristiano Castro (UFMG), Sílvia Almeida (IFMG)

Invited Talk
Thursday (Oct, 6)
17:15 – 18:00

WFPA.IT.2 - **Challenges in Neonatal Pain Assessment: Is there a role for a Computer Eye?**
Dr. Ruth Guinsburg (Dept. of Pediatrics, UNIFESP, São Paulo, Brazil)
Abstract: Newborn infants are exposed to painful experiences that might increase their short and long-term morbidity and mortality, in addition to being associated with neurological developmental disorders. Improvements in this scenario require practical and efficacious methods of pain assessment, safer drugs, organisation of services allowing for the detection of flaws in the care provided, and continuous updating and sensitisation of neonatal care providers. Routine bedside assessment of pain in critically ill neonates is considered crucial for the proper management of pain, but inappropriate assessment of neonatal pain is an integral component of the under-treatment of pain in neonatal care units. Humans might perhaps be inherently flawed in the assessment of pain in others, and if that were indeed the case, then human-mediated pain assessment should be replaced by technology. The situation just depicted defines the context of the conference, which will discuss the possibility of replacing the human with a computer eye in the recognition of the facial expressions of pain in newborn infants.