

TECHNICAL PROGRAM OVERVIEW

Monday, 05 July 2010		Tuesday, 06 July 2010		Wednesday, 07 July 2010	
08:00 - 09:00	Registration	08:45 - 09:00	Registration	08:45 - 09:00	Registration
09:00 - 09:10	Workshop opening	09:00 - 09:50	Keynote 3	09:00 - 09:50	Keynote 4
09:10 - 10:00	Keynote 1				
10:00 - 10:40	Oral Session 1 Color Analysis and Processing	09:50 - 10:30	Oral Session 3 Visual Communication and Processing	9:50 - 11:10	Oral Session 5 Visual Perception and Quality Metrics
10:40 - 11:00	<i>Coffee Break</i>	10:30 - 10:50	<i>Coffee Break</i>	11:10 - 11:30	<i>Coffee Break</i>
11:00 - 12:20	Oral Session 1 (cont'd)	10:50 - 12:30	Oral Session 3 (cont'd)	11:30 - 12:40	Poster Session 2
12:20 - 13:40	<i>Lunch</i>	12:30 - 13:40	<i>Lunch</i>	12:40 - 12:55	Closing (Best Student Paper Award)
13:45 - 14:35	Keynote 2			12:55 - 13:55	<i>Lunch</i>
14:35 - 15:55	Oral Session 2 Facial Image Analysis and Biometrics	13:45 - 15:25	Oral Session 4 Image Analysis and Classification		
15:55 - 16:15	<i>Coffee Break</i>	15:25 - 15:45	<i>Coffee Break</i>		
16:15 - 17:25	Poster Session 1	15:45 - 17:15	Student Poster Session		

Technical Program

EUVIP 2010, Paris, France

Monday 05.07.2010

08:00 – 09:00 **Registration**
09:00 – 09:10 **Workshop opening**
09:10 – 10:00 **Keynote 1** *S. Süsstrunk (EPFL, Switzerland)*
NEAR-INFRARED REVISITED: APPLICATIONS IN COMPUTATIONAL
PHOTOGRAPHY AND COMPUTER VISION

Oral Session 1 **Color Analysis and Processing**

Chair: Alain Tremeau (Univ. of Jean Monnet, France)

10:00 - 10:20
MODERN DISPLAYS: WHY WE SEE DIFFERENT COLORS, AND WHAT IT MEANS?
Abhijit Sarkar, Laurent Blondé, Patrick Le Callet, Florent Atrousseau, Jürgen Stauder, Patrick Morvan

10:20 - 10:40 **Invited Talk** *A. Tremeau (Univ. of Jean Monnet)*
COLOR FACE-TUNED SALIENT DETECTION FOR IMAGE QUALITY ASSESSMENT

10:40 - 11:00 **Coffee Break**

11:00 - 11:20
ENHANCING THE OUTPUT OF SPATIAL COLOR ALGORITHMS
ABM Tariqul Islam, Ivar Farup

11:20 - 11:40
SALIENT REGION DETECTION WITH OPPONENT COLOR BOOSTING
Guanqun Cao, Faouzi Alaya Cheikh

11:40 - 12:00
DEGRADED COLOR DOCUMENT IMAGE ENHANCEMENT BASED ON NRCIR
Shaohua Chen, Azeddine Beghdadi, Mohamed Cheriet

12:00 - 12:20
ANALYSIS AND COMPARISON OF QUALITY METRICS WITH REFERENCE BASED
ON UNIFORM COLOUR SPACES
Gabriel Dauphin, Patrick Viaris de Lesegno

12:20 - 13:40 **Lunch**

13:45 - 14:35 **Keynote 2** *J-L. Dugelay (Eurecom, France)*
INTRODUCTION TO FACE RECOGNITION AND NOVEL TRENDS

Oral Session 2 **Facial Image Analysis and Biometrics**

Chair: Mohamed Deriche (KUFPM, KSA)

14:35 - 14:55
GAZE SHIFTS AS DYNAMICAL RANDOM SAMPLING
Giuseppe Boccignone, Mario Ferraro

14:55 - 15:15
FEATURE SELECTION FOR FACIAL EXPRESSION RECOGNITION
Son Lam Phung, Peiyao Li, Abdeseelam Bouzerdoun, Fok Hing Chi Tivive

15:15 - 15:35
ADAPTIVE FUZZY COMMITMENT SCHEME BASED ON IRIS-CODE ERROR
ANALYSIS
Christian Rathgeb, Andreas Uhl

15:35 - 15:55 **Invited Talk** *P. Gaussier (Univ. of Cergy Pontoise, France)*
PERCEPTION: INSIGHTS FROM THE SENSORI-MOTOR APPROACH

15:55 - 16:15 **Coffee Break**

16:15 - 17:25

Poster Session 1 *Chair: Mohamed-Chaker Larabi (XLIM, Université de Poitiers, France)*

VARIABLE SELECTION FOR IMAGE QUALITY ASSESSMENT USING A NEURAL NETWORK BASED APPROACH

Atidel Lahoulou, Emmanuel Viennet, Mourad Haddadi

STATISTICAL EVALUATION OF NO-REFERENCE IMAGE VISUAL QUALITY METRICS

Nikolay Ponomarenko, Oleg Ereemeev, Vladimir Lukin, Karen Egiazarian

A VISUAL ATTENTION BASED REFERENCE FREE PERCEPTUAL QUALITY METRIC

Ali Imran, Fahad Guraya, Faouzi Alaya Cheikh

SEGMENTATION-BASED DOCUMENT IMAGE DENOISING

Rachid Hedjam, Mohamed Cheriet

INDEXING OF MULTILINGUAL NEWS TELECAST USING AUDIO - VISUAL KEYWORDS

Ashish Khare, hiranmay Ghosh, Amarendra Gorai, Sunil Kopparapu, Meghna Pandharipande

REVERSIBLE WATERMARKING USING PREDICTION AND DIFFERENCE EXPANSION

Marco Azzoni, Giulia Boato, Marco Carli, Karen Egiazarian

FACE DETECTION AND STEREO MATCHING ALGORITHMS FOR SMART SURVEILLANCE SYSTEM WITH IP CAMERAS

Nurulfajar Abd Manap, Gaetano Di Caterina, John Soraghan, Vijay Sidharth, Hui Yao

STEREOVISION BASED ALGORITHM FOR MEASURING FIRE SPREADING CHARACTERISTICS

Thierry Molinier, Lucile Rossi, Moulay Akhloufi, Yves Tison

SUBJECTIVE QUALITY ASSESSMENT OF MPEG-4 SCALABLE VIDEO CODING IN A MOBILE SCENARIO

Yohann Pitrey, Marcus Barkowsky, Patrick Le Callet, Romuald Pepion

SHAPE RECOVERY OF COLOR TEXTURED OBJECT USING FAST MARCHING METHOD VIA SELF-CALIBRATION

Yi Ding, Yuji Iwahori, Tsuyoshi Nakamura, Lifeng He, Robert Woodham, Hidenori Itoh

SPATIAL AND TEMPORAL STATISTICAL INFORMATION BASED MOTION ESTIMATION

Zhengya Xu, Hong Ren Wu, Xinghuo Yu

MEASURING PERCEPTUAL CONTRAST IN UNCONTROLLED ENVIRONMENTS

Gabriele Simone, Marius Pedersen, Jon Hardeberg

Tuesday 06.07.2010

09:00 - 09:50 **Keynote 3** A. Neri(*Università di Roma TRE*)
CIRCULAR HARMONIC FUNCTIONS: AN UNIFYING MATHEMATICAL
FRAMEWORK FOR IMAGE RESTORATION, ENHANCEMENT, INDEXING,
RETRIEVAL AND RECOGNITION

Oral Session 3 Visual Communication and Processing

Chair: Lina Karam (*Arizona State University, USA*)

09:50 - 10:10
IMAGE DENOISING BY ADAPTIVE LIFTING SCHEMES
Manel Abid, Marco Cagnazzo, Beatrice Pesquet-Popescu

10:10 - 10:30
FAST IMAGE INTERPOLATION USING CIRCULAR HARMONIC FUNCTIONS
Stefania Colonnese, Roberto Randi, Stefano Rinauro, Gaetano Scarano

10:30 - 10:50 **Coffee Break**

10:50 - 11:10
TELEVISION OVER IP OVERVIEW
Elena Mammi, Giuseppe Russo, Paolo Talone

11:10 - 11:30
MPEG 4 LASER - BASED THIN CLIENT REMOTE VIEWER
Bojan Joveski, Mihai Mitrea, Françoise Preteux

11:30 - 11:50
TEXTUAL NOISE ANALYSIS AND REMOVAL FOR EFFECTIVE SEARCH ENGINES
Tareq Jaber, Peter Milligan, Abbas Amira

11:50 - 12:10
VIDEO ERROR CONCEALMENT BASED ON DATA HIDING IN THE 3D WAVELET
DOMAIN
Federica Battisti, Marco Carli, Alessandro Neri

12:10 - 12:30
REAL-TIME TV COMMERCIAL MONITORING BASED ON ROBUST VISUAL
HASHING
Vlado Kitanovski, Dimitar Taskovski

12:30 - 13:40 **Lunch**

Oral Session 4 Image Analysis and Classification

Chair: Giuseppe Boccignogne (*Università degli Studi di Milano*)

13:45 - 14:05
BACKGROUND SUBTRACTION USING SPATIO-TEMPORAL CONTINUITIES
Srenivas Varadarajan, Lina Karam, Dinei Florencio

14:05 - 14:25
MARKOV RANDOM FIELDS FOR ABNORMAL BEHAVIOR DETECTION ON
HIGHWAYS
Philippe Bouttefroy, Azeddine Beghdadi, Abdesselam Bouzerdoun, Son Lam Phung

14:25 - 14:45
FAST DIGITAL OPTICAL FLOW ESTIMATION BASED ON EMD
Mickael Quelin, Abdesselam Bouzerdoun, Son Lam Phung

14:45 - 15:05
USING THE HVS BINOCULAR PROPERTIES FOR THE CONSTRUCTION OF A
COMPREHENSIVE STEREOSCOPIC MATCHING MODEL
Rafik Bensalma, Mohamed-Chaker Larabi

15:05 - 15:25

A NEW SUPPORT VECTOR MACHINE METHOD FOR MEDICAL IMAGE CLASSIFICATION

Trung Le, Dat Tran, Wanli Ma, Dharmendra Sharma

15:25 - 15:45 **Coffee Break**

15:45 - 17:15

Student Poster Session *Chair: Gabriel Dauphin (L2TI, Université Paris 13, France)*

THE KOLMOGOROV SPLINE NETWORK DECOMPOSITION AND ITS APPLICATIONS TO IMAGE PROCESSING

Pierre-Emmanuel Leni, Yohan D. Fougerolle, and Frédéric Truchetet

RAPID PROTOTYPING OF FINITE RADON TRANSFORM (FRAT) FOR MEDICAL IMAGING APPLICATIONS

A. Ahmad, A. Amira, Y. Berviller, H. Rabah

A NOVEL 3D SHAPE RETRIEVAL BASED ON DYNAMIC STRUCTURE OF LIGHT

Intuon Lertrusdachakul, Y. Fougerolle, O. Laligant

RESEARCH AND DEVELOPMENT OF STEREOVISION TECHNIQUES WITHIN AN INDUSTRIAL ENVIRONMENT

Jimmy Pelcat

A Novel approach in Text binarization in Natural Scene Images

Sezer Karaoglu1, Fernando Basural, Sajib Kumar Sahal, Alain Trémeau

WHERE PEOPLE GAZE WHEN LOOKING AT A BLURRY IMAGE WITH A SHARP REGION

R. A. Khan, É. Dinet, H. Konik

VIDEO COLLECTION SUMMARIZATION BY SEMANTIC GRAPH COMPARISON

Philippe Ercolessi, Christine Sénac, Hervé Bredin, Philippe Joly

A JPEG-LIKE ALGORITHM FOR COMPRESSION OF CAMERA SENSORS IMAGES

Omar Benahmed Daho, Mohamed-Chaker Larabi

COMPARISON OF VARIOUS VIDEO QUALITY METRICS ON DIFFERENT TYPES OF VIDEO ARTIFACTS

Seyed Ali Amirshahi, Mohamed-Chaker Larabi

A NEW METHOD OF CONTRAST ENHANCEMENT BASED ON STEERABLE PYRAMID TRANSFORM

Daikha Cherifi, Azeddine Beghdadi

COLOR-TIMING ECHO RESTORATION FOR HD FILMS

Quoc Bao Do, Marie Luong, Azeddine Beghdadi

A NEW SPATIO-TEMPORAL PJND MODEL

Phi-Bang Nguyen, Azeddine Beghdadi, Marie Luong

Wednesday 07.07.2010

09:00 - 09:50 **Keynote 4** *L. Karam* (Arizona State University, Tempe, USA)
THE PAST, PRESENT, AND FUTURE OF VISUAL QUALITY ASSESSMENT

Oral Session 5 **Visual Perception and Quality Metrics**

Chair: Patrick Le Callet (IRCCyN lab, Polytech'Nantes, France)

09:50 - 10:10
VISUAL QUALITY INDICES AND LOW QUALITY IMAGES
Heinz Hofbauer, Andreas Uhl

10:10 - 10:30
IMPROVING IMAGE QUALITY ASSESSMENT WITH MODELING VISUAL ATTENTION
Junyong You, Andrew Perkis, Moncef Gabbouj

10:30 - 10:50
IMAGE DISTORTION ANALYSIS AND CLASSIFICATION SCHEME USING A NEURAL APPROACH
Aladine Chetouani, Azeddine Beghdadi, Mohamed Deriche

10:50 - 11:10 **Invited Talk** *C. Cavaro-Menard*
DIAGNOSTIC QUALITY ASSESSMENT OF MEDICAL IMAGES: CHALLENGES AND TRENDS

11:10 - 11:30 **Coffee Break**

Poster Session 2

Chair : Mihai Mitrea (ARTEMIS, France)

11:30 - 12:40
IRIS FEATURES EXTRACTION USING WAVE ATOMS
Serir Amina, Boutella Leila, Zehira Haddad

MODELING LONG MEMORY EYE GAZE DATA
Ritaja Sur, Lior Noy, Tamar Flash, Benjamin Kedem

MODELING VISUAL INFORMATION BY SPATIO-TEMPORAL PATTERNS TO ANALYZE EVENT TACTIC IN SPORTS VIDEO
Keita Masui, Son Dao, Noboru Babaguchi

MODIFIED CONFUSION-DIFFUSION BASED SATELLITE IMAGE CIPHER USING CHAOTIC STANDARD, LOGISTIC AND SINE MAPS
Goumidi Djamel Eddine, Hachouf Fellah

A STUDY ON LIGHT INFORMATION HIDING METHOD COMPATIBLE WITH CONVENTIONAL H.264/AVC
Shuya Yamadera, Seiichiro Hangai, Naoya Wada

DEFINITION OF DESCRIPTORS FOR SEMANTIC IMAGE INTERPRETATION
Marina Ivasic-Kos, Patrizia Poscic, Mile Pavlic

WINDOW DETECTION IN COMPLEX FACADES
Michal Recky, Franz Leberl

A NEW FPGA-BASED DYNAMIC PARTIAL RECONFIGURATION DESIGN FLOW AND ENVIRONMENT FOR IMAGE PROCESSING APPLICATIONS
Benjamin Krill, Afandi Ahmad, Abbes Amira, Hassan Rabah

ENHANCEMENT OF LOW LIGHT IMAGE BASED ON GUASSIAN MIXTURE
MODELING

KaminiKanta Mohanty, Mahesh Gellaboina

IMPACT OF EDGES CHARACTERIZATION ON IMAGE CLUSTERING

Luca Costantini, Licia Capodiferro, Alessandro Neri, Marco Carli

CONTENT-BASED CLASSIFICATION OF GRAPHICAL DOCUMENT IMAGES

Ashish Khare, Puneet Jeph, hiranmay Ghosh

TEXT EXTRACTION FROM DEGRADED DOCUMENT IMAGES

Rachid Hedjam, Reza Farrahi-Moghadam, Mohamed Cheriet

12:40 - 12:55 **Closing (Best Student Paper Award)**

12:55 - 13:55 **Lunch**