Track I-WeCA: Intelligent Web Computing and Applications

I-WeCA-S1: Data Mining and Intelligent Data Processing
Chair: Joe Tekli, Lebanese American University, Lebanon

(102) Flick: Japanese Input Method Editor using N-gram and Recurrent Neural Network Language Model based Predictive Text Input
Yukino Ikegami, Yoshitaka Sakurai, Ernesto Damiani, Rainer Knauf, Setsuo Tsuruta

(66) An approach to mine Time Interval based Weighted Sequential Patterns in Sequence Databases
Sirisha Alamanda, Suresh Pabboju, Narsimha Gugulothu

I-WeCA-S2: Data Semantics and Web-Centric Systems
Chair: Kokou Yetongnon, University of Bourgogne

(5) An Improving Mapping Process Based on a Clustering Algorithm for Modeling Hybrid and Dynamic Ontological User Profile
Yannick-Ulrich Samen Tchantchou, Eugène C. Ezin

(88) Overview of Event-based Collective Knowledge Management in Multimedia Digital Ecosystems
Minale A. Abebe, Joe Tekli, Fekade Getahun, Richard Chbeir, Gilbert Tekli

(56) Trust Inference using Implicit Influence for Item Recommendation
Bithika Pal, Mamata Jenamani

I-WeCA-S3: Intelligent Web Applications and Tools
Chair: Richard Chbeir, University of Pau, France

(34) I Am 'Totally' Human: Bypassing the reCaptcha
Samuel S. Brown, Nicholas DiBari, Sojaj Bhatia

(68) Implementation and Customization of a Smart Mirror Through a Facial Recognition Authentication and a Personalized News Recommendation Algorithm
Ivette Cristina Araujo Garcia, Eduardo Rodrigo Linares Salmon, Rosario Villalta Riega, Alfredo Barrientos Padilla

(173) Toward Altmetric-driven Research-Paper Recommender System Framework
Maake Benard Magara, Prof. Sunday Ojo, Prof. Tranos Zuva
Track LHNA: Large, Heterogeneous Networks and their Applications

**LHNA-S1: Track LHNA**
*Chair Ana Roxin, University of Bourgogne, France*

(67) A system to improve the accuracy of Numeric Weather Prediction (NWP) for flood forecasting systems
Joel Tanzouak, Ndiouma Bame, Blaise Yenke, Idrissa Sarr

(155) Cardiac Surgery Rehabilitation System (CSRS) for a Personalized Support to Patients
Giuseppe Caggianese, Mariaconsiglia Calabrese, Luigi Gallo, Giovanna Sannino, Carmine Vecchione

(157) Performance Evaluation of Artificial Bee Colony and Compressive Sensing Based Energy Efficient Protocol for WSNs
Simranpreet Kaur, Shivani Sharma

(191) Predicting Number of Connections on Video Streaming Server with Machine Learning Approach
Amit Shrivastava, Anand Rajavat, Rahul Deshmukh

Track MIRA: Multimedia Information Retrieval and Application

**MIRA-S1: Track MIRA**
*Chair: Andrea Kutics, ICU, Japan*

(41) Deep Interactive Region Segmentation and Captioning
Ali Sharifi Boroujerdi, Maryam Khanian, Michael Breuß

(59) Texture Based Video Steganography Technique Using Block-Wise Encryption
Shilpa Goyal, Maninder Singh Nehra

(61) A computer vision framework for automatic description of Indian Monuments
Pushkar Shukla, Beena Rautela, Ankush Mittal

(98) Indian Dance form Recognition from Videos
Ankita Bisht, Riya Bora, goutam Saini, Pushkar Shukla, Ankita Bisht

(104) Clause Anaphora Resolution of Japanese Demonstrative Determiner by Ontology Extension using Distributed Expression of Words
Yukino Ikegami, Rainer Knauf, Ernesto Damiani, Setsuo Tsuruta, Yoshitaka Sakurai

(135) Spam Detection in Social Media Employing Machine Learning Tool for Text Mining
Sadia Sharmin, Zakia Zaman

(169) Classification in Big Image Datasets Using Layered-SOM
Akihiko Nakagawa, Andrea Kutics

Track: Signal Image & Vision Technologies

**SIVT-S1: MEDICAL APPLICATIONS**
*Chair: Albert Dipanda, University of Bourgogne, France*

(100) Blood Vessel Segmentation using Hybrid Median Filtering and Morphological Transformation
Neha Gour, Pritee Khanna

(109) Automatic Extraction of Breast Region in Raw Mammograms Using a Combined Strategy
Cyrille Feudjio, Alain Tiedeu, John Klein, Olivier Colot

(126) Post-traumatic Epilepsy in rats: An algorithm for detection of suspicious EEG activity
Ivan A. Kershner, Yuri V. Obukhov, Ilya G. Komoltsev

(128) Investigation of Specificity of Parkinson's Disease Features Obtained Using the Method of Cerebral Cortex Electrical Activity Analysis Based on Wave Trains
Olga S. Sushkova, Alexei A. Morozov, Alexandra V. Gabova

(148) Early Diagnosis of Osteoporosis using Active Appearance Model and Metacarpal Radiogrammetry
Mathew Sam, Anu Shaju Areeckal, Sumam David S.

**SIVT-S2: Learning and Classification**
*Chair: Neeta Nain, MNIT Jaipur, India*

(45) Multimodal Spam Classification Using Deep Learning Techniques
Shikhar Seth, Sagar Biswas

(60) Classification and Aesthetic Evaluation of Paintings and Artworks
Tarpat Sahu, Arjun Tyagi, Sonu Kumar, Dr. Ankush Mittal
IPSegNet: Deep Convolutional Neural Network based Segmentation Framework for Iris and Pupil
Shreyas Malakarjun Patil, Ranjeet Ranjan Jha, Aditya Nigam

A Deep Learning Hybrid CNN Framework Approach for Vegetation Cover Mapping using Deep Features
Rahul Nijhawan, Himanshu Sharma, Harshita Sahni, Ashita Batra

An Integrated Deep Learning Framework Approach for Nail Disease Identification
Rahul Nijhawan, Rose Verma, Ayushi, Shashank Bhushan, Rajat Dua, Ankush Mittal

SIVT-S3: Face and Human Characteristic Identification
Chair: Neeta Nain, MNIT Jaipur, India

Generating Cancelable Palmprint Templates using Local Binary Pattern and Random Projection
Maroti Deshmukh, Manoj Kumar Balwant

Cancelable Iris Template Generation Using Modulo Operation
Munaga V N K Prasad, Alagolu Jyothi, Kavadi Lasya

Pholder: An Eye-Gaze Assisted Reading Application on Android
Christiantia Wirawan, Hu Qingyao, Liu Yi, Senglidet Yean, Bu-Sung Lee, Fang Ran

Pyramid Binary Pattern for Age Invariant Face Verification
Saraj Bijnina, Preety Singh

Robust Gender Classification Using Multi-spectral Imaging
Narayan Vetrekar, Raghavendra Ramachandra, Kiran B. Raja, R. S. Gad, Christoph Busch

A Curvature Based Approach for the Automated Screening of Retinopathy of Prematurity in Preterm Infants
Sivakumar R, Veena V, Renu John

SIVT4: Theory and Methods
Chair: Albert Dipanda, University of Bourgogne, France

Texture representation using Galois Field for Rotation Invariant Classification
Shivashankar S, Medha Kudari, Prakash S. Hiremath

Rattletale: Phase-Coherent Teleskinetic Imaging to Detect Tattletale Signs of Structural Defects or Potential Failure
Steve Mann

Amalgamated Approach for Devanagari Script Corpus for OCR & Demographic Purpose and XML for Linguistic Annotation
Maninder Singh Nehra, Neeta Nain, Mushtaq Ahmed, Prakash Choudhary, Deepa Modi

New Color Filter Array Interpolation Method Based on Mixed Color Channel Correlation
Yipeng Hua, Xiaoyang Miao, Xiangdong Chen

Using Color Difference Equations for Calculating Gradient Images
Seyed Ali Amirshahi, Seyed Hossein Amirshahi, Joachim Denzler

Modelling Complex Volume Shape Using Ellipsoid: Application to Pore Space Representation
Alain Tresor Kemgue, Olivier Monga, Serge Moto Mpong, Sebti Foufou

Mesh Visual Quality Assessment Metrics: A Comparison Study
Ilyass Abouelaziz, Aladine Chetouani, Mohammed El Hassouni, Hocine Cherifi

Segmentation of Synthetic Textures Employing Gabor Filter Magnitude in a Multi-Channeling Environment
Mudassir Rafi, Susanta Mukhopadhyay

SIVT5: Applications
Chair: Olivier Monga, IRD, France

Analysing Acceleration for Motion Analysis
Yan Sun, Jonathan S. Hare, Mark S. Nixon

A Large Scale Crowd Density Classification using Spatio-Temporal Local Binary Pattern
Sonu Lamba, Neeta Nain

Performance Comparison of High Efficiency Video Coding (HEVC) with H.264 AVC
Chena Ram, Subhash Panwar

Development of Methods and Algorithms Based on Object-Oriented Logic Programming for Video Monitoring of Laboratory Rodents
Alexei A. Morozov, Olga S. Sushkova, Sandipkumar M. Vaniya

Generalised Spatio Temporal Feature Based Important Activity Synopsis Generation
Tapas Badal, Neeta Nain, Mushtaq Ahmed
Mixte Session Track SIVT / Workshop HTBA

SIVT-S6 / HTBA: Human Tracking and Behaviour Analysis
Chair: Cyrille Migniot, University of Bourgogne, France

(27) FallFree: Multiple Fall Scenario Dataset of Cane Users for Monitoring Applications Using Kinect
Mona Saleh Alzahrani, Salma Kamounn Jarraya, Manar Ali Salamah, Hanéne Ben-Abdallah

(91) Human Detection using HOG-SVM, Mixture of Gaussian and Background Contours Subtraction
Abdourahman Housein Ahmed, Kidiyo Kpalma, Abdoulkader Osman Guedi

(132) Recurrent Neural Network based Action Recognition from 3D Skeleton Data
Parul Shukla, Kanad K Biswas, Prem K Kalra

(130) Occupancy Analysis of Soccer Fields Using Wide-Angle Lens
Noor Ul Huda, Rikke Gada, Thomas Baltzer Moeslund

(188) Tracking Hands in Interaction with Objects: A Review
Ammar Ahmad, Cyrille Migniot, Albert Dipanda

Workshops : BigCVEn(Big Data meets Cloud and Virtualized Environment) and DARWIN (Distributed, Autonomic and Robust Wireless Networks)

BigCVEn/DARWIN-S1: Workshops BigCVEn and DARWIN
Chair: Ana Roxin, Diallo Gayo, Wahabou Abdou, France

(58) Impact of Mobility on Community Sensing with Environment Sensors
Atanu Mandal, Sunanda Bose, Nandini Mukherjee

(120) A Review on Applications of Big Data for Disaster Management
Muhammad Arslan, Ana-Maria Roxin, Christophe Cruz, Dominique Ghinac

(138) A Graph Matching Approach based on Aggregated Search
Ghizlane Echbarthi, Hamamache Kheddouci

(139) Overcoming Broadcast Storm Problem in a Vehicular Network
E. A Feukeu, T. Zuva

Workshop IWAIIP: Artificial Intelligent Approaches for Image Processing

IWAIIP-S1: Workshop IWAIIP
Chair: Thaweesak Yingthawornsuk, King Mongkut's University of Technology Thonburi, Thailand

(146) Human Activity Recognition using Triaxial Acceleration Data from Smartphone and Ensemble Learning
Narit Hnoohom, Sakorn Mekruksavanich, Anuchit Jitpattanakul

(166) An Integration of Myo Armbands and an Android-based Mobile Application for Communication with Hearing-impaired Persons
Malika Vachirapipop, Safra Soymat, Wasurat Tirarannakul, Narit Hnoohom

(172) Automatic Thai Coin Calculation System by Using SIFT
Thaweesak Yingthawornsuk, Narumol Chumuang, Mahasak Ketcham

(182) Identifying Behavioral Design Flaws in Evolving Object-Oriented Software Using An Ontology-Based Approach
Sakorn Mekruksavanich

Workshops KARE (Knowledge Acquisition Reuse & Evaluation) and OBIS (Open Business Intelligence Systems)

KARE/OBIS-S1: Workshops KARE and OBIS
Chair: Davy Monticolo, University of Lorraine, France

(115) A Crowdsourcing Based Framework for E-Government: Suspect Identification and Investigation
Hasna El Alaoui El Abdallauoi, Abdelaziz El Fazikki, Fatima Zohra Ennaji, Mohamed Sadgal

(145) Virtual Reality and Recommendation System to Design Mobility System
Alex Gabriel, Mario Ortiz
**Workshop NAMDAC: Numerical Algorithms and Methods for Data Analysis and Classification**

**NAMDAC-S1: Workshop NAMDAC**  
*Chair: Salvatore Cuomo, University of Naples Federico II, Naples, Italy*

- **(28)** An Efficient Hybrid-Clustream Algorithm for Stream Mining  
  Ashish Kumar, Ajmer Singh, Rajvir Singh
- **(119)** Opposition-Based Sine Cosine Algorithm (OSCA) for Training Feed-Forward Neural Networks  
  Divya Bairathi, Dinesh Gopalani
- **(129)** First Experiences on an Accurate SPH Method on GPUs  
  Elisa Francomano, Ardelio Galletti, Livia Marcellino, Marta Paliaga
- **(164)** A GPU-parallel Algorithm for Fast Hybrid BFS-DFS Graph Traversal  
  Antonio Maratea, Livia Marcellino, Vincenzo Duraccio
- **(168)** Variable Width Rough-Fuzzy c-Means  
  Alessio Ferone, Ardelio Galletti, Antonio Maratea

**Workshop VICTA: Visions on Internet of Cultural Things and Applications**

**VICTA-S1: Workshop VICTA**  
*Chair: Angelo Chianese, University of Naples “Federico II”, Italy*

- **(30)** Workflows and Challenges Involved in Creation of Realistic Immersive Virtual Museum, Heritage, and Tourism Experiences: A Comprehensive Reference for 3D Asset Capturing  
  Human Esmaeili, Harold Thwaites, Peter Charles Woods
- **(53)** The Internet of Things (IoT): A Study of Architectural Elements  
  Deepika Navani, Sanjeev Jain, Maninder Singh Nehra
- **(96)** Adaptive Reuse of Cultural Heritage Elements and Fragments in Public Spaces: The Internet of Cultural Things and Applications as Infrastructures for Learning in Smart Cities  
  H. Patricia McKenna
- **(142)** Visitor Assistant Tools Based on Machine Learning Approaches in Cultural Heritage Contexts  
  Salvatore Cuomo, Ugo Chirico