International Conference on Pattern Analysis and Intelligent Systems Conference Program

October.24-25, 2018 Tebessa, Algeria

Tuesday, October 23, 2018

16:00→18:00 - Welcome Reception & Registration. Hotel Mehaya palace Tebessa.

Wednesday, October 24, 2018

08:00- Welcome Reception & Registration 09:00 —09:30 - Welcome to PAIS Conference

09:30—10:30: Opening keynote: On biologically inspired computational intelligence: opportunities and challenges. **Dr. Ammar BELATRACHE**, Northumbria University, Newcastle, UK. **Chair: Pr. Okba KAZAR & Nacereddine ZAROUR**

10:30—11:00- Break (Photo session & Coffee)

SESSION 1: (Auditorium) Machine Vision & Intelligent Systems

Chair: Pr. M.R. Laouar & Pr. H Bendjenna

| 11:00–11:15 | Mohamed Amine Ferrag | Taxonomy of Biometric-based Authentication Schemes for Mobile Computing Devices. |
|--------------|----------------------|---|
| 11:15–11:30- | Bouteraa Imad | Intrusion Detection using Data Mining: A contemporary comparative study. |
| 11:30–11:45- | Abid Saber | Encrypted Traffic Classification: Combining Overand Under-Sampling through a PCA-SVM. |
| 11:45–12:00- | Houria Sebai | Improving high-resolution satellite images retrieval using Linear SVM classifier and data augmentation. |
| 12:15–12:30- | Hayet Belghit- | Vision-based Pose Estimation for Augmented Reality: A Comparison Study. |

12:30-14:00- Lunch

14:00 —Three parallel Sessions

SESSION 2 (Room 1): Software Development

Chair: Pr. N. ZAROUR & Dr. A. BOURAMOUL

| 14:00–14:15- | Dali Youcef Sarra. | Semi- automatic segmentation method of Left Ventricle in Cardiac Cine MRI for analysis of myocardial viability. |
|--------------|----------------------------|---|
| 14:15–14:30 | Fatima Zouaoui | - Natural Image Character Recognition Using One Class- Principal Component Analysis Classifier. |
| 14:30–14:45- | Mohamed Elhadi Rahmani. | Medical Plants Recognition Based on Ensemble Classification of DNA sequences. |
| 14:45–15:00- | Mohammed DEMRI. | Enhanced Cuckoo Search-based Clustering Protocol for Wireless Sensor Networks. |
| 15:00–15:15- | Djamel Aouam. | Voice-based Augmented Reality Interactive System for Car's Components Assembly. |
| 15:15–15:30- | Abdeldjalil Ledmi. | Fault Tolerance in Distributed Systems: A Survey. |

SESSION 3 (Room 2): Artificial Intelligence

Chair: Pr. O. KAZAR & Dr. L. DJAKHEDJAKHA

| 14:00–14:15- | Saad KHADAR. | Dual Direct Torque Control of Doubly Fed Induction Machine using Artificial Neural Network. |
|----------------|----------------------|---|
| 14:15–14:30- | Bachir Boucheham | LMDS-SEA: Upgrading the Shape Exchange Algorithm (SEA) to handle general time series classification by local matching and distance selection. Abdelmadjid Lahreche, |
| 4:30–14:45- | Abdelhakim Chergui. | 1Kinship Verification from Facial Images using Deep Features. |
| 14:45–15:00- | Kheireddine Abainia. | Bio-inspired Approach for Inverse Kinematics of 6-DOF Robot Manipulator with Obstacle Avoidance. |
| 15:00–15:15- | Elhaouari Kobzili. | Geometric Binary Descriptor Based Monocular SLAM. |
| 15 :15-15 :30- | Selma Ouareth. | A Component-Based MAPE-K Control Loop Model for Self-adaptation. |

SESSION 4 (Auditorium): Machine Vision

Chair: Pr. N. GHOUALMI & Pr. A. BACHIR

| 14:00–14:15- | Allal Tiberkak. | Set Theory-based FSM for Managing Home Emergencies: |
|--------------|-----------------------|--|
| | | Concept, Properties and Process Algebra. |
| 14:15-14:30- | Mohcene Bessaoudi. | An Efficient Multimodal 2D and 3D Face Verification |
| | | Based on High Order Tensor Representation. |
| 14:30-14:45- | Benrais Lamine | Local Binary Pattern and Tchebychev Moments as a |
| | | Single Image Discriptor. |
| | | |
| 14:45-15:00- | LAOUABER Zineb Aziza. | A system for the automatic detection of glaucoma using |
| | | retinal images. |
| 15:00-15:15- | Amel | HIGHER-ORDER SPATIAL STATISTICS: A STRONG |
| | BOULEMNADJEL. | ALTERNATIVE IN IMAGE PROCESSING. |
| | | |
| 15:15–15:30- | BOUCHELOUKH | Stereo Visual Odometry for Mobile Robot |
| | Abdelghani | |

15:30-16:00- Break Coffee & Poster session (Machine Vision & Intelligent Systems)

- A small look at the ear recognition process using a Binarized Statistical Image Features (ML-BSIF).
 Maarouf Korichi.
- Implementation of a Preventive Maintenance System Based on Augmented Reality. **Rabie Hamidane**.
- New monitoring system for Baby Incubator using Wireless Sensor Networks & Android. Benahmed khelifa.
- Decision process for safety based on Bayesian approach. Nassima AISSANI.
- Using A Real-coded Genetic Algorithm to Predict Characterization Parameters for Algerian Saharan blend Petroleum Fraction. Chafik Belghit.

SESSION 2 (Room 1): Software Development

Chair: Pr. N. ZAROUR & Dr. A. BOURAMOUL

| 16:00–16:15- | Merzoug Soltane. | A Self-adaptive Agent-based System for Cloud Platforms. |
|--------------|--------------------|--|
| 16:15–16:30- | Abdelhakim Zeroual | Deep authentication model in Mobile Cloud Computing |
| 16:30–16:45- | Mohamed HEMILI | Use of Multi-criteria decision analysis to make collection management decisions. |
| 16:45-17:00- | ALLAM Ahmed. | 3D Robots Formation cooperative Control Using EFDs. |

.SESSION 5 (Room 2): Technological excellence and social innovation

Chair: Pr. O. KAZAR & Dr. L. DJAKHEDJAKHA

| 16:00–16:15- | Oubadi Sihem. | Distributed Clustering Routing Protocol based on PSO and Sleep Scheduling for Heterogeneous WSNs. |
|--------------|------------------|---|
| 16:15–16:30- | . Zouaoui Samia. | Multi-Agent Systems and Ontology for Supporting Management System in Smart School |
| 16:30–16:45- | Mohamed Sandeli. | Optimizing Energy in Wireless Sensor Networks using a Quantum Artificial Bee Colony. |
| 16:45–17:00- | Meriem Bahi. | Deep Learning for Ligand Based Virtual Screening in Drug Discovery. |

SESSION 4 (Auditorium): Machine vision

Chair: Pr. N. GHOUALMI & Pr. A. BACHIR

| 16:00–16:15- | Kheireddine Abainia. | Toward Accurate Social Media Language Identification: |
|--------------|----------------------|--|
| | | Combining Language Features with a Graphical Approach. |
| 16:15-16:30- | Fairouz Merrouche. | Fall Detection versus Activity Recognition using Hu |
| | | Moments and HOG Descriptor. |
| | | - |
| 16:30-16:45- | Djamel Samai. | 2D and 3D Palmprint Recognition using Deep Learning |
| | | Method. |
| 16:45-17:00- | Atef Bentahar | IoT Securing System using Fuzzy Commitment for DCT- |
| | | based Fingerprint Recognition. |

Thursday, October 25, 2018

08 :30 - 09 :30- Keynote. A multimedia sensor network. **Pr. Richard CHBEIR**, LIUPPA Laboratory Université de Pau et des Pays de l'Adour (UPPA).

Chair: Pr. N. GHOUALMI & Pr. A. BACHIR.

SESSION 6 (Auditorium): Intelligent Systems

Chair: Pr. CHAWI Allaoua & Dr. Ahmime Ahmed.

| 09:30-09:50 | Abdallah Meraoumia. | Towards a Secure Online E-voting Protocol Based on Palmprint Features. |
|-------------|------------------------|---|
| 09:50-09:10 | BITAT Abir. | Towards formal verification of cryptographic circuits: A functional approach. |
| 10:10-10:30 | Kheireddine Abainia | Detecting Algerian Sub-Dialects of On-Line in Social Media Networks. |

10:30-11:15- Break Coffee & Poster session (Technological excellence and social innovation & Artificial Intelligence)

- An approach for Semantic Enrichment of Sensor Data. **Meriem Djezzar**.
- Vanet routing protocols: discussion of various Ad-hoc On-demand Distance Vector (AODV) improvements. **Hanene Brahmia**.
- Deep learning for online harassment detection in tweets. Tolba Marwa.
- A New Multi-Varied Arabic Corpus. Khouloud Meskaldji.
- Resolving Multiple Sequence Alignment Problem Using an Intelligent Cooperative Algorithm. Lamiche Chaabane

11:15-12:00- Best papers award & Closing Session 12:00-15:00- Lunch & Horse Festival



