Thirteenth International Conference on Intelligent Systems Design and Applications (ISDA 2013)

Malaysia

December 08-10, 2013

** Technical Programme **

- December 08, 2013 -
- * Free Day *

Registration desk will operate from 14:00 - 16:00 hrs

December 09, 2013

08:30 - 09:00: Opening ceremony

09:00 - 09:50: Plenary talk 1: Intelligent Systems Design and Applications - A Perspective from Industry Thillai Raj Ramanathan, MIMOS Berhad, Malaysia

09:50 - 10:20: coffee break

10:20 - 13:00

Session: Function Approximation I

- 3 Fusion of spectral and time domain features for crowd noise classification system Ramu Reddy Vempada, Aniruddha Sinha and Guruprasad Seshadri
- 4 High quality text-to-speech synthesis system with efficient duration models developed using coding schemes based on vowel production characteristics Ramu Reddy Vempada and K. Sreenivasa Rao

22 Signature Segmentation and Recognition for Scanned Document Retrieval Ranju Mandal, Partha Roy, Umapada Pal and Michael Blumenstein

34 Stimulus-stimulus Association via Reinforcement Learning in Spiking Neural Network Nooraini Yusoff and Farzana Kabir Ahmad

46 An Approach for an Automatic Fracture Detection of Skull Dicom Images based on Neighboring Pixels Nirase Fathima Abubacker, Azreen Azman, Masrah Azrifah and Shyamala Doraisamy

47 Gait Based People Identification System using Multiple Switching Kinects Rohan Banerjee, Aniruddha Sinha and Kingshuk Chakravarty

48 Copy Move Forgery Detection using DWT and SIFT Features
Mohammad Farukh Hashmi, Aaditya R. Hambarde and Avinash G. Keskar

13:00 - 14:00: Lunch

14:00-15:00: Plenary Talk 2: Fairness Relations and their Applications to Networking, Data Analysis and Optimization
Mario Koeppen, Kyushu Institute of Technology, Japan

15:00 - 16:30

Session: Function Approximation II

24 Educational Data Mining: A Case Study of Teacher's Classroom Questions
Anwar Ali Yahya, Addin Osman and Ahmed Alattab

26 PCA and LDA as Dimension Reduction for Individuality of Handwriting in Writer Verification Ramlee Rimashadira, Muda Azah Kamilah and Syed Ahmad Sharifah Sakinah

58 Cloud Mobi Framework Architecture: A Social Interaction Travel Recommendation System Framework using AHP method Perly Thai Ee Peh, Yun-Huoy Choo and Burhanuddin Mohd Aboobaider

60 3D Imaging of Human Brain in the Diagnostics of Insomnia and Depression: a Comparative Analysis, a Novel Insomnia/Depression Diagnostics Approach, and Lessons Learned
Tiia Ikonen, Keijo Haataja and Pekka Toivanen

62 Text2MARK - A text mining tool in the aid of knowledge representation Clay Palmeira, Jefferson Morais and Dionne Monteiro

80 Modeling Academic Achievement of UUM Graduate Using Data Mining Fadzilah Siraj

16:30 - 16:45: coffee break

19:00 - 21:00 : Conference Dinner

December 10, 2013

08:30 - 09:15: Plenary talk 3: Bayesian Reasoning for Military Identification and Classification Albert Bodenmueller, Cassidian, Germany

09:15 - 10:00: Plenary talk 4: ViaRODOS.eu - Implementation of intelligent transport system Jan Martinovic, IT4Innovations - Center of excellence, VSB - Technical University of Ostrava, Czech Republic

10:00 - 10:20: Coffee break

10:20 - 11:45

Parallel Session I: Optimization

- 8 Solving Asymmetric Traveling Salesman Problems using a Generic Bee Colony Optimization Framework with Insertion Local Search Li-Pei Wong, Ahamad Tajudin Khader, Mohammed Azmi Al-Betar and Tien-Ping Tan
- 12 The Impact of Refinement Strategies on Sequential Clustering Algorithms
- M. C. Nicoletti, E. M. Real and O. L. Oliveira
- 39 Hybridization of Particle Swarm Optimization with adaptive Genetic Algorithm operators Suraya Masrom
- 66 Significance Relations for the Benchmarking of Meta-Heuristic Algorithms Mario Koeppen and Kei Ohnishi
- 67 An Artificial Immune System Algorithm for Optimizing The Distributed Production Scheduling in The Semiconductor Assembly Industry Nur Ifwah Mohd Anuar, Umi Kalsom Yusof and Mohd Nor Akmal Khalid

11::45 - 13:00

Parallel Session II: Applications

- 11 A Multi-agent Knowledge Expert Locating System: A Software Agent Simulation on Personal Knowledge Management (PKM) Model Shahrinaz Ismail, Tran Duc Nguyen and Mohd Sharifuddin Ahmad
- 15 Towards a Generic Agent-based Simulation Model for Time-constrained Tasks
 Tran Nguyen, Alicia Y.C. Tang and Azhana Ahmad
- 17 Concept-based Video Retrieval Model Based On The Combination of Semantic Similarity Measures

Sara Memar, Lilly Suriani Affendey, Norwati Mustapha and Mohammadreza Ektefa

37 Semantic Question Answering of Umra Pilgrims to Enable Self-Guided Education Nurfadhlina Mohd Sharef, Masrah Azrifah Azmi Murad and Aida Mustapha

10:20 - 13:00
Parallel Session IIi: Web Intelligence
Chair:

- 13 Detecting Deceptive Reviews Using Lexical and Syntactic Features
 Somayeh Shojaee, Masrah Azrifah Azmi Murad, Azreen Azman, Nurfadhlina Mohd Sharef and Samaneh Nadali
- 19 An Ontology-based Search Engine for Postgraduate Students Information at the Ministry of Higher Education Portal of Iraq Hazim Abed, Alicia Tang and Zaihisma Cob
- 23 An ontology development approach with a focus on human centered design Rizwan Iqbal, Masrah Azrifah Azmi Murad, Aida Mustapha and Nurfadhlina Mohd. Sharef
- 29 An HTTPS approach to Resist Man in the Middle Attack in Secure SMS Using ECC and RSA Muhammad Murad Khan, Majid Bakhtiari and Saeid Bakhtiari
- 32 Receiver-Based AODV Routing Protocol for MANETS Abdulaziz Al-Nahari, Mohd Murtadha Mohamad and Saleh Al-Sharaeh
- 38 ULUL-ILM: The Design of Web-Based Adaptive Educational Hypermedia System Based on Learning Style Bilal Luqman Bayasut, Gede Pramudya and Halizah Basiron
- 40 Agents of Things (AoT): An Intelligent Operational Concept of the Internet of Things (IoT)
 Anas M Mzahm, Mohd Sharifuddin Ahmed and Alicia Y. C.

Tang

42 Towards More Accurate and Intelligent Recommendation Systems

Timo Kähärä, Keijo Haataja and Pekka Toivanen

55 Applying Semantic Similarity Measures to Enhance Topic-Specific Web Crawling Ali Pesaraghader, Norwati Mustapha and Ahmad Pesaranghader

13:00 - 14:00 : Lunch

14:00 - 14:45: Plenary Talk 5 - Run and Share your Research findings: Is it a Novel Era of Research Sharing and Reproducibility?
Layth Sliman, EFREI, France

14:45: 16:00

Parallel Session IV: Pattern Recognition and Applications

- 21 Sclera Recognition Using Dense-SIFT Abhijit Das, Umapada Pal, Miguel Ferrer and Michael Blumenstein
- 27 Prime Order Elliptic Curve Generation Methods: A Review Saeid Bakhtiari, Subariah Ibrahim and Mazleena Salleh
- 51 Personal and Extended Intelligence in Collective Emergence Saraswathy Shamini, Mohd. Sharifuddin Ahmad and Salama A. Mostafa
- 56 Implementation of Buckwalter Transliteration to Malay Corpora
 Juhaida Abu Bakar, Khairuddin Omar, Mohammad Faidzul
 Nasrudin, Mohd Zamri Murah and Che Wan Shamsul Bahri C.
 W. Ahmad
- 57 A Temporal-Focused Trustworthiness to Enhance Trustbased Recommender Systems

Morteza Ghorbani Moghaddam, Norwati Mustapha, Aida Mustapha and Nurfadhlina Mohd Sharef

Parallel Session V: Complex networks: data processing and log analysis

- 65 Compression-based similarity in EEG signals Michal Prilepok, Jan Platos, Vaclav Snasel and Ibrahim Salem Jahan
- 71 Irradiance prediction using Echo State Queueing Networks and Differential Polynomial Neural Networks Sebastian Basterrech, Ladislav Zjavka, Lukas Prokop and Stanislav Misek
- 73 Scalable Parallel SOM Learning for Web User Profiles Lukas Vojacek, Jiri Dvorsky, Katerina Slaninova and Jan Martinovič
- 74 User Behavioural Patterns and Reduced User Profiles Extracted From Log Files Katerina Slaninova
- 75 An Empirical Study of L2-Boost with Echo State Networks
 Sebastian Basterrech
- 16:00 16;20 Coffee break

16:20 - 17:15 :

Parallel Session V: Data processing and applications

68 Classification of SNPs for Obesity Analysis using FARNeM Modelling Phaik-Ling Ong, Yun-Huoy Choo and Nurul Akmar Emran

- 72 Color Fuzzy Set Design for Dental Applications Luis Herrera, Oscar Emilio Pecho, Razvan Ghinea, Ignacio Rojas, Hector Pomares, Alberto Guillen, Ana Ionescu, Juan de la Cruz Cardona, Rosa Pulgar and María del Mar Pérez
- 77 Rotation Invariant Texture Feature Based on Spatial Dependence Matrix for Timber Defect Detection Ummi Raba'Ah Hashim, Siti Zaiton Mohd Hashim, Azah

16:20 - 17:30 :

Parallel Session VI: Computer Security and Intelligence (CSI 2013)

- 81 A Review of Cyberbullying Detection: An Overview Samaneh Nadali, Masrah Azrifah Azmi Murad, Nurfadhlina Mohamad Sharif, Aida Mustafa and Somayeh Shojaee
- 82 Feature Extraction Process: A Phishing Detection Approach
 Ahmad Abunadi, Oluwatobi Akanbi and Anazida Zainal
- 83 Spam detection using hybrid Artificial Neural Network and Genetic Algorithm Anas Arram, Anazida Zainal and Hisham Mousa
- 84 A Review of Anonymous Authentication Mechanisms for Health Information Management Systems Shukor Abd Razak and Muhammad Syafiq Samsi
- 85 Identification of Spam Email Based on Information from Email Header Shukor Abd Razak and Ahmad Fahrulrazie Mohamad
- * Posters Presentations *
- 9 Rough Set Theory Approach for Filtering Spams from boundary messages in a Chat System Sanjiban Sekhar Roy, Saptarshi Charaborty, Swapnil Sourav and Ajith Abraham
- 10 Self-adaptive Differential Particle Swarm using a Ring Topology for Multimodal Optimization Gonzalo Napoles, Isel Grau, Rafael Bello, Rafael Falcon and Ajith Abraham
- 25 Modeling Expert Preference using the Qualitative Belief function Framework
 Amel Ennaceur, Zied Elouedi and Eric Lefevre
- 30 Classifying Breast Cancer Types Based on Fine Needle

Aspiration Biopsy Data Using Random Forest Classifier Farzana Kabir Ahmad and Nooraini Yusoff

- 36 Multiple Faces Recognition in Real-Time Using Cloud Computing, Emgu CV and Windows Azure Diego Von Sohsten and SÉrgio Fernandes
- 45 Random Validation and Fault Detection Method in Systems Implementations
 Danilo Valeros Bernardo
- 50 Toward Full-text Searching Middleware over Hierarchical Documents
 Kun Ma, Yang Bo and Ajith Abraham
- 59 A Metahueristic Optimisation Based on Commensalism Fitranto Kusumo, Mohammad Faidzul Nasrudin and Dwi Yanuar Panji Tresna
- 63 Multidimensional Temporal Clustering: geometrical similarity measures analysis in k-means Ramona Stoica
- 64 A tool for comparing multirelational networks from biology Ramona Stoica
- 76 Comparison of different computational intelligent classifier to autonomously detect cardiac pathologies diagnosed by ECG Olga Valenzuela and Ignacio Rojas
- 78 A Baseline Time Series Data Mining Model for Forecasts in Port Logistics and Economics Ana Halabi Echeverry, Deborah Richards and Ayse Bilgin
- 79 Extracting Workflow Structures through Bayesian Learning and Provenance Data Simone Ludwig
- 80 The Potential Effectiveness of the Detection of Pulsed Signals in the Non-Uniform Sampling Arthur Smirnov, Stanislav Vorobiev and Ajith Abraham

81 The Influence of Depression on Deactivation and Neural Correlates During Mental Arithmetic Tasks Shigang Feng, Wei Wang, Liang Chen, Hongyu Fan, Ajith Abraham, Jianlin Wu