CISIM 2014
13th International Conference on Computer Information Systems and Industrial Management Applications

Ho Chi Minh City, Vietnam
November 5-7, 2014

Ton Duc Thang University

Preliminary Programme

CISIM 2014 – 1st day  Wednesday, November 5, 2014

8:00 - 9:00 Conference Registration
9:00 - 9:45 Conference Welcome
10:00 - 11:00 Keynote speech: prof. Jaroslav Pokorny
   How to store and process Big Data: are today’s databases sufficient?
11:00 - 11:20 Coffee Break
11:20 - 13:00 Algorithms
   (Chair: Vaclav Snasel)
   - Tien Lu, Bay Vo, Hien T. Nguyen, and Tzung-Pei Hong
     A New Method for Mining High Average Utility Itemsets
   - Ivan Zelinka, Petr Saloun, and Roman Senkerik
     Chaos Powered Grammatical Evolution
   - Ammlan Ghosh, Anubhab Sahin, Anirban Silsarma, and Rituparna Chaki
     A New Contention Management Technique for Obstruction Free Transactional Memory
   - Dariusz Jankowski and Konrad Jackowski
     Evolutionary Algorithm for Decision Tree Induction
   - Lukas Vojacek, Pavla Drazdilova, and Jiri Dvorsky
     Combination of Self Organizing Maps and Growing Neural Gas

13:00 - 14:30 Lunch
14:30 - 15:40 Data Analysis and Informational Retrieval I
   (Chair: Ivan Zelinka)
   - Alisa Babskova, Jan Martinovic, Pavla Drazdilova, and Katerina Slaninova
     Dynamic Centrality for Directed Co-Author Network with Context
   - Mai Nhat Vinh, Nguyen Nhat Duy, Ho Thi Hoang Vy, and Le Nguyen Hoai Nam
     An Approach for Integrating Multidimensional Database into Context-Aware Recommender System
   - Hong-Quan Hua, T. Hoang Ngan Le, and Bac Le
     An Effective Initialization for ASM-Based Methods
   - Dariusz Rafal Augustyn
     Query Selectivity Estimation Based on Improved V-Optimal Histogram by Introducing Information about Distribution of Boundaries of Range Query Conditions
   - Ryszard Tadeusiewicz and Adrian Horzyk
Man-Machine Interaction Improvement by Means of Automatic Human Personality Identification

15:40 - 15:50 Coffee Break

15:50 - 17:30 Modelling and Optimization
(Chair: Ngoc Thanh Nguyen)

- Huu-Thanh Duong and Bao-Quoc Ho
  A Vietnamese Question Answering System in Vietnam’s Legal Documents
- Tapalina Bhattacharyya, Khalid Saeed, Nabendu Chaki, and Rituparna Chaki
  A Survey of Security and Privacy Issues for Biometrics based Remote Authentication in Cloud
- Worapong Jakkhupan and Supasit Kajkamhaeng
  Movie Recommendation using OLAP and Multidimensional Data Model
- Thinh D. Bui, Son T. Nguyen, and Quoc B. Ho
  Towards a Conceptual Search for Vietnamese Legal Text
- Ywen Huang, Zhua Jiang, Xde Xiang, Cneng He, Jfeng Liu, and Ying Huang
  An Inner-Enterprise Wiki System (IWkS) Integrated with an Expert Finding Mechanism for Lesson-Learned Knowledge Accumulation in Product Design

17:30 - 19:00 Welcome Drink and Poster Session

- Maciej Brzozowski and Andrzei Chmielewski
  Hardware Approach for Generating B-Detectors by Immune-Based Algorithms
- Imed El Fray, Tomasz Hyla, and Wlodzimierz Chocianowicz
  Protection Profile for secure sensitive information system on mobile devices
- Wladyslaw Homenda, Agnieszka Jastrzebska, and Witold Pedrycz
  Joining Concept’s Based Fuzzy Cognitive Map Model with Moving Window Technique for Time Series Modeling
- Wladyslaw Homenda, Agnieszka Jastrzebska, and Witold Pedrycz
  Time Series Modeling with Fuzzy Cognitive Maps: Simplification Strategies
- Wladyslaw Homenda and Wojciech Lesinski: Decision Trees and Their Families in Imbalanced Pattern Recognition
  Recognition with and without Rejection
- Małgorzata Lucinska and Slawomir T. Wierzchon
  Spectral Clustering Based on Analysis of Eigenvector Properties
- Hieu Ngoc Duong, Quyen Thi Ngoc Nguyen, Long Ta Bui, Hien T. Nguyen, and Vaclav Snasel
  Applying Recurrent Fuzzy Neural Network to Predict the Runoff of Srepok River
- Hien T. Nguyen, Phuc H. Duong, and Vinh T. Vo
  Vietnamese Sentence Similarity Based on Concepts
- Stepan Ozana, Martin Pies, and Radovan Hajovsky
  Computation of Swing-up Signal for Inverted Pendulum Using Dynamic Optimization
- Piotr Panasiuk, Marcin Dąbrowski, Khalid Saeed, and Katarzyna Bochenska-Włostowska
  On the Comparison of the Keystroke Dynamics Databases
- Anna Pieta, Michal Lupa, Monika Chuchro, Adam Piorkowski, and Andrzei Lesniak
A Model of a System for Stream Data Storage and Analysis Dedicated to Sensor Networks of Embankment Monitoring
- Emil Saeed, Anna Bartocha, Piotr Wachulec, and Khalid Saeed

Influence of Eye Diseases on the Retina Pattern Recognition
- Paramita Sarkar and Ditipriya Sinha

An Approach to Continuous Pervasive Care of Remote Patients based on Priority Based Assignment of Nurse
- Chien-Wen Shen and Chin-Jin Kuo

Analysis of Social Influence and Information Dissemination in Social Media: The Case of Twitter
- Vaclav Svaton, Jan Martinovic, Katerina Slaninova, and Vaclav Snasel

Improving Rule Selection from Robot Soccer Strategy with Substrategies
- Adam Szczepanski, Krzysztof Misztal, and Khalid Saeed

Pupil and Iris Detection Algorithm for Near-Infrared Capture Devices
- Petr Saloun, Peter Drabik, Ivan Zelinka, and Jaroslav Bucko

Big Data Spectra Analysis using Analytical Programming and Random Decision Forests
- Jakub Stolfa, Svatopluk Stolfa, Katerina Slaninova, Jan Martinovic, and Vaclav Snasel

An Impact of the User and Time Parameters to Sequence Alignment Methods for Process Mining
- Muhammad Waseem Anwar and Farooque Azam

Proposing a Novel Architecture of Script Component to Incorporate the Scripting Language Support in SCADA Systems
- Feng Xie, Yong Peng, Wei Zhao, Yang Gao, and Xuefeng Han

CISIM 2014 – 2nd day Thursday, November 6, 2014

9:00 - 10:00 Keynote speech: prof. Ngoc Thanh Nguyen
Processing Collective Knowledge – Conflict Resolution and Integration Aspects

10:00 - 11:40 Industrial Management and Other Applications
(Chair: Jan Martinovic)
- Juan Carlos Figueroa-Garcia, Emanuel Jonathan Medina-Pinzon, and Jannan David Rubio-Espinoza
Non-Cooperative Games Involving Type-2 Fuzzy Uncertainty: An approach
- Michal Pluhacek, Roman Senkerik, and Ivan Zelinka
Chaos Driven Particle Swarm Optimization with Basic Particle Performance Evaluation - An Initial Study
- Phan T.H. Nguyen and Thang H. Bui
A Multiple Refinement Approach in Abstraction Model Checking
- Roman Senkerik, Michal Pluhacek, Ivan Zelinka, Donald Davendra, and Zuzana Kominkova Oplatkova
Comparison of Chaos Driven PSO and Differential Evolution on the Selected PID Tuning Problem
- Ripon Kumar Chakrabortty, Ruhul Amin Sarker, and Daryl Essam
Event Based Approaches for Solving Multi-mode Resource Constraints Project Scheduling Problem

11:40 - 12:00 Coffee Break
12:00 - 13:40 Data Analysis and Informational Retrieval II  
(Chair: Vo Bay)  
- Dusan Fedorca, Tomas Kocyan, Martin Hajek, Daniela Szturcova, and Jan Martinovic: viaRODOS  
  Monitoring and Visualisation of Current Traffic Situation on Highways  
- Seiji Sugiyama, Daisuke Yokozawa, Atsushi Ikuta, Satoshi Hiratsuka, Susumu Saito, Miyuki Shibata, and Tohru Matsuura  
  Abbreviation Method for Some Jointed Relations in Displaying Genealogy  
- Antoni Portero, Stepan Kuchar, Radim Vavrik, Martin Golasowski, and Vit Vondrak  
  System and Application Scenarios for Disaster Management Processes, the Rainfall-Runoff Model Case Study  
- Adrija Bhattacharya, Avirup Das, Sankhay Choudhury, and Nabendu Chaki  
  Agent-Based Context Management for Service-Oriented Environments  
- Santanu Roy, Ranak Ghosh, and Soumya Sen  
  Materialized View Construction Based on Clustering  

13:40 - 15:00 Lunch  

15:00 - 16:00 Panel Discussion with Rectors  

16:00 - 16:20 Coffee Break  

16:20 - 18:00 Various Aspects of Computer Security  
(Chair: Katerina Slaninova)  
- Tomasz Hyla, Witold Mackow, and Jerzy Pejas  
  Implicit and Explicit Certificates-based Encryption Scheme  
- Bartosz Jasiul, Marcin Szpyrka, and Joanna Sliwa  
  Malware Behavior Modeling with Colored Petri Nets  
- Loc Hoang Tran, Linh Hoang Tran, and Hoang Trang  
  Novel Ranking Methods Applied to Complex Membership Determination Problems  
- Nguyen Van Nhuong, Vo Thi Yen Nhi, Nguyen Tan Cam, Mai Xuan Phu, and Cao Dang Tan  
  Semantic Set Analysis for Malware Detection  
- Rafal Kozik, Michal Choras, Rafal Renk, and Witold Holubowicz  
  A Proposal of Algorithm for Web Applications Cyber Attack Detection  

19:00 - 22:00 Gala dinner  

CISIM 2014 – 3rd day: Friday, November 7, 2014  

9:00 - 10:00 Keynote speech: prof. Sushmita Mitra  
Soft Computing: Excursion through Fuzzy Sets, Neural Networks, Genetic Algorithms, and Rough Sets  

10:00 - 11:40 Pattern Recognition and Image Processing  
(Chair: Nguyen Thanh Hien)  
- Przemyslaw Spurek, Alena Chaikouskaya, Jacek Tabor, and Elzbieta Zajac  
  A Local Gaussian Filter and Adaptive Morphology as Tools for Completing Partially Discontinuous Curves  
- Nhat-Quan Huynh Nguyen and Thai Hoang Le  
  Enhanced LBP-Based Face Recognition System Using a Heuristic Approach for Searching Weight Set
- Przemysław Spurek, Marek Smieja, and Krzysztof Misztal
  Subspaces Clustering Approach to Lossy Image Compression
- Puchong Subpratatsavee and Pramote Kuacharoen
  An Implementation of a Paper Based Authentication Using HC2D Barcode and Digital Signature
- Puchong Subpratatsavee and Suchai Tanaiadehawoot
  Grasping Action for Impaired Vision Action Using HC2D Barcode Technology

11:40 - 12:00 Coffee Break
12:00 - 13:40 Networking
(Chair: Wladyslaw Homenda)
- Przemysław Berezinski, Marcin Szpyrka, Bartosz Jasiul, and Michal Mazur
  Network Anomaly Detection Using Parameterized Entropy
- Daniel Oliveira, Diana Oliveira, Nuno M. Garcia, and Graça Esgalhado
  An Off-the-Shelf Platform for Automatic and Interactive Text Messaging Using Short Message Service
- Vo Dang Khoa, Tran Vu Pham, Huynh Tuong Nguyen, and Tran Van Hoai
  Multi-Criteria Route Planning in Bus Network
- Jan Dvorak, Ondrej Berger, and Ondrej Krejcar
  Universal Central Control of Home Appliances as an Expanding Element of the Smart Home Concepts
- Stepan Ozana, Martin Pies, Radovan Hajovsky, Jiri Koziorek, and Ondrej Horacek
  Application of PIL approach for Automated Transportation Center

14:00 - 15:20 Lunch + Closing Ceremony

Post-Conference Event Saturday, November 8, 2014
Trip/Excursion to Mekong Delta, Vietnam