

KSE 2015 PROGRAM

Ho Chi Minh City, Vietnam, October 8-10, 2015

Conference Day 1 - October 8, 2015 (Thu)

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| 8:00 - 16:00 | Registration | | |
| 8:30 - 8:45 | Opening Remarks from Conference Chairs | | |
| 8:45 - 9:30 | <p>Keynote Talk: Prof. Shin'ichi Satoh (NII, Japan) - <i>Observing Society via Television - Challenges towards Social Analysis by Using Large-Scale Broadcast Video Archive</i></p> <p>Chair: Satoshi Tojo Location: Conference Hall</p> | | |
| 9:30 - 10:00 | Coffee Break | | |
| 10:00 - 12:00 | <p>Session Thu-1A: Pattern Recognition and Image Analysis 1</p> <p>Chair: Atsuo Yoshitaka Location: Conference Hall</p> <p>Personal Authentication Using Relevance Vector Machine (RVM) for Biometric Match Score Fusion <i>Long Binh Tran and Thai Hoang Le</i></p> <p>An Efficient Model for Simultaneous Face Detection, Pose Estimation and Landmark</p> | <p>Session Thu-1B: Natural Language Processing 1</p> <p>Chair: Vinh V Nguyen Location: Tulip</p> <p>Combination of Features for Vietnamese News Multi-document Summarization <i>Van-Giau Ung, An-Vinh Luong, Nhi-Thao Tran, and Minh-Quoc Nghiem</i></p> <p>Recognizing Textual Entailment in Vietnamese Text: An Experimental Study</p> | <p>Special Session: Information System and Communication Protocol for Vehicular Technology</p> <p>Chair: Dong-Chul Park Location: Daisy</p> <p>A Real-Time Streaming System for a Multifunctional Vehicle Information Display Based on TMO <i>Dongmin Kim, Kimoon Hong, Byeongyong Jung, and Jungguk Kim</i></p> <p>Tracking-Learning-Detection Adopted Unsupervised Learning Algorithm</p> |

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| | <p>Localisation <i>Hung Thanh Vu, Mai Vuong Minh Nhat, and Bac Le</i></p> <p>MobiRAR: Real-Time Human Activity Recognition Using Mobile Devices <i>Cuong Pham</i></p> <p>Multiple Kernel Learning and Optical Flow for Action Recognition in RGB-D Video <i>Vo Hoai Viet, Ly Quoc Ngoc, Tran Thai Son, and Pham Minh Hoang</i></p> <p>Divergence Filter for Saliency <i>Dao Nam Anh</i></p> <p>Uniform Detection in Social Image Streams <i>Nguyen Quang Manh, Nguyen Duc Tuan, Dinh Viet Sang, Huynh Thi Thanh Binh, and Nguyen Thi Thuy</i></p> | <p><i>Minh-Tien Nguyen, Quang-Thuy Ha, Thi-Dung Nguyen, Tri-Thanh Nguyen, and Le-Minh Nguyen</i></p> <p>Semantic Parsing for Vietnamese Question Answering System <i>Vu Xuan Tung, Nguyen Le Minh, and Duc Tam Hoang</i></p> <p>Error Analysis for Vietnamese Dependency Parsing <i>Kiet Van Nguyen and Ngan Luu-Thuy Nguyen</i></p> <p>Improving Vietnamese Sentence Compression by Segmenting Meaning Chunks <i>Nhi-Thao Tran, Van-Giau Ung, An-Vinh Luong, Minh-Quoc Nghiem, and Ngan Luu-Thuy Nguyen</i></p> <p>A Combined Approach for Disease/Disorder Template Filling <i>Nghia Huynh and Quoc Ho</i></p> | <p><i>Eunae Park, Hyuntae Ju, Yong Mu Jeong, and Soo-Young Min</i></p> <p>A Graph Model for Hybrid Recommender System <i>Do Thi Lien, Nguyen Xuan Anh, and Nguyen Duy Phuong</i></p> <p>Research on Environment Build about the Synchronous Ethernet Gateway Performance Evaluation for Vehicle <i>Jonghwa Oh, Sujin Kwag, and Heeseok Moon</i></p> <p>Design and Implementation of Communication Interface between WAVE Module and Gateway <i>Sung-Cheol Pyo, Jae-Hwan Yoon, Sung-Chul Min, and Sang-Sun Lee</i></p> <p>Obstacle Detection Using a Fish Eyes Lens Camera on Moving Vehicle <i>Jaemin Ban, Seungyeol Lee, and Myungwon Bae</i></p> <p>A Study on the Performance Evaluation Method for CAN Wire Harnesses <i>Jaeseok Jeon, Jonghwa Oh, Sujin Kwag, and Heeseok Moon</i></p> <p>Tracking Pedestrian on Fisheye Lens Images for Automobile Safety System <i>Miso Jang, Keun Park, Dong-Chul Park, Yong-Mu Jeong and Soo-Young Min</i></p> <p>Fast Learning for Convolutional Neural</p> |
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| | | | Network on Image Classification <i>Keonhee Lee</i> A Gateway Platform for Synchronous Ethernet of in-Vehicle Network <i>Seongmin Kim</i> |
| 12:30 - 13:30 | Lunch (Buffet) | | |
| 13:30 - 14:15 | Keynote Talk: Prof. Gerhard Rigoll (TUM, Germany) - <i>Recent Developments in Multimodal Human-Machine and Human-to-Human Communication</i> Chair: Duy-Dinh Le Location: Conference Hall | | |
| 14:15 - 15:00 | Keynote Talk: Dr. Koji Zettsu (NICT, Japan) - <i>Cyber-Physical-Social Data Fusion in IoT</i> Chair: Tuan A. Nguyen Location: Conference Hall | | |
| 15:00 - 15:30 | Coffee Break | | |
| 15:30 - 17:30 | Special Session: Legal Text Processing Chair: Nakamura Makoto Location: Conference Hall Analyzing Belief Re-revision by Consideration of Reliability Change in Legal Case <i>Pimolluck Jirakunkanok, Katsuhiko Sano, and Satoshi Tojo</i> Similarity Measure among Structures of Local Government Statute Books Based | Special Session-Knowledge Representation and Intelligent Software Chair: Jason J. Jung, Nhon V. Do Location: Tulip A Variation of COKB Model for Solving Problems about Chemical Elements <i>Nhon Van Do and Phat Vinh Huynh</i> Intelligent Problem Solving Based on COKB Model | Special Session: Fuzzy Logics and Intelligent Systems Chair: Cuong C. Bui Location: Daisy Methods for Abnormal Usage Detection in Developing Intelligent Systems for Smart Homes <i>Tran Nguyen Minh-Thai and Nguyen Thai-Nghe</i> Performance Measurement for Interactive Multi-objective Evolutionary Algorithms |

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| | <p>on Tree Edit Distance <i>Yoichi Takenaka and Takeshi Wakao</i></p> <p>Improvement of Translation Accuracy for the Outlines of Japanese Statutes by Splitting Parenthesized Expressions <i>Okada Kouhei, Ogawa Yasuhiro, Nakamura Makoto, Ohno Tomohiro, and Toyama Katsuhiko</i></p> <p>SPY: A Novel Resampling Method for Improving Classification Performance in Imbalanced Data <i>Xuan Tho Dang, Dang Hung Tran, Osamu Hirose, and Kenji Satou</i></p> <p>Concept Drift Detection with Clustering via Statistical Change Detection Methods <i>Yusuke Sakamoto, Ken-Ichi Fukui, João Gama, Daniela Nicklas, Koichi Moriyama, and Masayuki Numao</i></p> <p>Dynamic Logic for Multi-agent (Mis) Communication <i>Katsuhiko Sano and Satoshi Tojo</i></p> | <p><i>Do V. Nhon and Mai T. Thanh</i></p> <p>A Hybrid Feature Selection Method for Vietnamese Text Classification <i>Nguyen Tri Hai, Nguyen Hoang Nghia, Tuan Dinh Le, and Vu Thanh Nguyen</i></p> <p>Discovering Communities of Users on Social Networks Based on Topic Model Combined with Kohonen Network <i>Thanh Ho and Phuc Do</i></p> <p>A Mathematical Approach for Representing Knowledge about Relations and Its Application <i>Hien D. Nguyen, Vuong T. Pham, Trung T. Le, and Dat H. Tran</i></p> | <p><i>Long Nguyen, Hung Nguyen Xuan, and Lam Thu Bui</i></p> <p>An Involutive Picture Fuzzy Negator on Picture Fuzzy Sets and Some De Morgan Triples <i>Bui Cong Cuong, Roan Thi Ngan, and Bui Duong Hai</i></p> <p>Some Fuzzy Logic Operators for Picture Fuzzy Sets <i>Bui Cong Cuong and Pham Van Hai</i></p> <p>Some Extensions of Membership Graphs for Picture Inference Systems <i>Pham Van Viet, Hoang Thi Minh Chau, Le Hoang Son, and Pham Van Hai</i></p> <p>Towards a Fuzzy Probabilistic Relational Data Base Model <i>Hoa Nguyen</i></p> |
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Conference Day 2 - October 9, 2015 (Fri)

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| 8:00 - 16:00 | Registration | |
| 8:30 - 9:15 | <p>Keynote Talk: Prof. Limsoon Wong (NUS - Singapore) - <i>Some Issues That Are Often Overlooked in Big Data Analytics</i></p> <p>Chair: Phuc Do Location: Tulip</p> | |
| 9:15 - 10:00 | <p>Keynote Talk: Prof. Keiji Hirata (FUN, Japan) - <i>Introduction to Computerized Music Theory</i></p> <p>Chair: Minh L. Nguyen Location: Tulip</p> | |
| 10:00 - 10:30 | Coffee Break | |
| 10:30 - 12:30 | <p>Session Fri-1A: Software Engineering 1</p> <p>Chair: Katsuhiko Sano Location: Tulip</p> <p>Cooperative IaaS Resource Management: Policy and Simulation Framework <i>Giang Son Tran and Thi Phuong Nghiem</i></p> <p>ALCLM: A Description Logic over Lattice with Concept Modifiers <i>Duc-Khanh Tran</i></p> | <p>Session Fri-2A: Natural Language Processing 2</p> <p>Chair: Ngo Xuan Bach Location: Daisy</p> <p>Building Population-Specific Reference Genomes: A Case Study of Vietnamese Reference Genome <i>Nguyen Dai Thanh, Pham Thi Minh Trang, Dang Thanh Hai, Nguyen Ha Anh Tuan, Le Si Quang, Bui Quang Minh, Dao Quang Minh, Pham Bao Son, and Le Sy Vinh</i></p> <p>Mining Vietnamese Comparative Sentences for Sentiment Analysis <i>Ngô Xuân Bách, Phạm Đức Văn, Nguyễn Đình Tài, and Tô Minh Phương</i></p> |

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| | <p>A Tree-Based, Domain-Oriented Software Architecture for Interactive Object-Oriented Applications <i>Duc Minh Le</i></p> <p>A Domain-Oriented, Java Specification Language <i>Duc Minh Le</i></p> <p>Reusing Symbolic Observation Graph for Efficient Model Checking <i>Pham Duy Bao Trung, Trinh Van Giang, Le Dinh Thuan, and Quan Thanh Tho</i></p> <p>Multi-relational Factorization Models for Student Modeling in Intelligent Tutoring Systems <i>Nguyen Thai-Nghe and Lars Schmidt-Thieme</i></p> | <p>Paraphrase Identification in Vietnamese Documents <i>Ngo Xuan Bach, Tran Thi Oanh, Nguyen Trung Hai, and Tu Minh Phuong</i></p> <p>L2S: Transforming Natural Language Questions into SQL Queries <i>Duc Tam Hoang, Minh Le Nguyen, and Son Bao Pham</i></p> <p>MVRM: A Hybrid Approach to Predict siRNA Efficacy <i>Bui Ngoc Thang, Le Sy Vinh, and Ho Tu Bao</i></p> <p>Word Graph-Based Multi-sentence Compression: Re-ranking Candidates Using Frequent Words <i>An-Vinh Luong, Nhi-Thao Tran, Van-Giau Ung, and Minh-Quoc Nghiem</i></p> <p>A Potential Approach to Overcome Data Limitation in Scientific Publication Recommendation <i>Hung Nghiep Tran, Tin Huynh, and Kiem Hoang</i></p> |
| 12:30 - 13:30 | Lunch (Buffet) | |
| 13:30 - 14:15 | <p>Keynote Talk: Prof. Yuichi Tanaka (TUAT, Japan) - <i>Graph Signal Processing: Extracting Information from Signals on Networks</i></p> <p>Chair: Thanh D. Ngo Location: Tulip</p> | |
| 14:15 - 15:00 | <p>Keynote Talk: Prof. Jason J. Jung (CAU, Korea) - <i>Social Data Analytics and Knowledge Management</i></p> <p>Chair: Nhon V. Do Location: Tulip</p> | |

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| 15:00 - 15:30 | <i>Coffee Break</i> | |
| 15:30 - 17:30 | <p>Session Fri-2A: Pattern Recognition and Image Analysis 2</p> <p>Chair: Yuichi Tanaka Location: Tulip</p> <p>Extracting Gait Figures in a Video Based on Markerless Motion <i>Worapan Kusakunniran</i></p> <p>Using Textual Semantic Similarity to Improve Clustering Quality of Web Video Search Results <i>Phuc Quang Nguyen, Anh-Thu Nguyen-Thi, Thanh Duc Ngo, and Tu-Anh Hoang Nguyen</i></p> <p>Comparison of Watermarking Schemes Using Linear and Nonlinear Feature Matching <i>Ta Minh Thanh and Keisuke Tanaka</i></p> <p>Extended DCT Domain for Improving the Quality of Watermarked Image <i>Ta Minh Thanh and Nguyen Trung Thanh</i></p> <p>Reversible Medical Image Watermarking Technique Based on Choosing Threshold Values in Histogram Shifting <i>Tri H. Nguyen and Duc M. Duong</i></p> <p>A Model for Automatically Detecting and Blocking Pornographic</p> | <p>Session Fri-2B: Software Engineering 2</p> <p>Chair: Lam Thu Bui Location: Daisy</p> <p>DF-AMS: Proposed Solutions for Multi-Sensor Data Fusion in Wireless Sensor Networks <i>Duong Viet Huy and Nguyen Dinh Viet</i></p> <p>Parallelized Flower Pollination Algorithm with a Communication Strategy <i>Trong-The Nguyen, Chin-Shiuh Shieh, Mong-Fong Horng, Thi-Kien Dao, and Truong-Giang Ngo</i></p> <p>A New Statement about Direct Exponent of an MDS Matrix in Block Ciphers <i>Tran Thi Luong, Nguyen Ngoc Cuong, and Luong The Dung</i></p> <p>Towards an Open Data Development Model for Linking Heterogeneous Data Sources <i>Sulayman K. Sowe and Koji Zettsu</i></p> <p>SC Meeting</p> |

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| | Websites <i>Thuy-An Dinh, Tan-Binh Ngo, and Duc-Lung Vu</i> | |
| 18:00 - 20:30 | Banquet (Cung Dinh Restaurant) | |

Conference Day 3 - October 10, 2015 (Sat)

8:00 - 9:00

Registration

08:30 - 10:00

Session Sat-1A: Algorithms 1

Chair: Sulayman K. Sowe

Location: Tulip

Forecasting Time Series Water Levels on Mekong River Using Machine Learning Models

Thanh-Tung Nguyen, Quynh Nguyen Huu, and Mark Junjie Li

Constraint-Based MDL Principle for Semi-Supervised Classification of Time Series

Vo Thanh Vinh and Duong Tuan Anh

Similarity Search for Numerous Patterns in Multiple High-Speed Time-Series Streams

Bui Cong Giao and Duong Tuan Anh

Measuring Similarity between Vehicle Speed Records Using Dynamic Time Warping

Tran T. Tin, Nguyen T. Hien, and Vo Thanh Vinh

Workshop on Pattern Recognition for Multimedia Content Analysis

Session Sat-W1B: Pattern Analysis and Recognition

Chair: Dung D. Nguyen

Location: Daisy

Automatic Labeling Streaming Data for Event Detection from Heterogeneous Sensors

Minh-Son Dao and Koji Zettsu

Robust Finger Vein Identification Base on Discriminant Orientation Feature

Hoang Thien Van, Thanh Tuan Thai, and Thai Hoang Le

Using Hand Postures for Interacting with Assistant Robot in Library

Van-Toi Nguyen, Thanh-Hai Tran, Thi-Lan Le, Remy Mullot, and Vincent Courboulay

3D Object Finding Using Geometrical Constraints on Depth Images

Van-Hung Le, Hai Vu, Thuy Thi Nguyen, Thi-Lan Le, Thi-Thanh-Hai Tran, Michiel Vlaminck, Wilfried Philips, and Peter Veelaert

Comparative Study on Vision Based Rice Seed Varieties Identification

Phan Thi Thu Hong, Tran Thi Thanh Hai, Le Thi Lan, Vo Ta Hoang, Vu Hai, and Thuy Thi Nguyen

Delaunay Sparse Saliency

Dao Nam Anh

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| 10:00 - 10:30 | Coffee Break | |
| 10:30 - 12:00 | <p>Session Sat-2A: Algorithms 2</p> <p>Chair: Duy-Dinh Le Location: Tulip</p> <p>Similarity Measure for Fiber Clustering: A Constant Time Complexity Algorithm <i>Tran Anh Quan and Bay Vo</i></p> <p>Fast Approximate near Neighbor Algorithm by Clustering in High Dimensions <i>Hung Tran-The, Vinh Nguyen Van, and Minh Hoang Anh</i></p> <p>A Robust Self-Organizing Approach to Effectively Clustering Incomplete Data <i>Vo Thi Ngoc Chau</i></p> | <p>Workshop on Pattern Recognition for Multimedia Content Analysis Session Sat-W2B: Machine Learning Techniques for Multimedia Processing</p> <p>Chair: Thanh D. Ngo Location: Daisy</p> <p>An L1-Regression Random Forests Method for Forecasting of Hoa Binh Reservoir's Incoming Flow <i>Thanh-Tung Nguyen</i></p> <p>A Study on Non-sparse Dictionary Learning for Pattern Classification <i>Nguyen Duc Tuan, Nguyen Quang Manh, Dinh Viet Sang, Huynh Thi Thanh Binh, and Nguyen Thi Thuy</i></p> <p>Generalized Max Pooling for Action Recognition <i>Trang Nguyen, Sang Phan, and Thanh Duc Ngo</i></p> <p>Kinect Gesture Recognition: SVM vs. RVM <i>Duc-Dung Nguyen and Hai-Son Le</i></p> <p>Keynote Talk: Jean-Marc OGIER</p> |