情報システム研究会

[委員長] 小野俊之（日立製作所）
[副委員長] 田中哲雄（神奈川工科大学）
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[幹事補佐] 森津俊之（日立製作所）、佐賀亮介（大阪府立大学）

日 時 平成 24 年 12 月 6 日（木）～ 平成 24 年 12 月 8 日（土）
場 所 王立プノンペン大学
（Russian Federation Boulevard, Toul Kork, Phnom Penh, Cambodia.）
議 題 テーマ “The First Asian Conference on Information Systems”

12 月 6 日 13:30-15:30

Session 1: Pattern Recognition
IS-12-056  Adaptive Locally Linear Embedding For Face Hallucination
Metee Thongdee (Rangsit University)  
Parinya Sanguansat (Panyapiwat Institute of Management)

IS-12-057  A Music Information Retrieval Using Multiple Classifiers System
Nattha Phiwma, Prisana Mutchima (Suan Dusit Rajabhat University)  
Parinya Sanguansat (Panyapiwat Institute of Management)

IS-12-058  Compressive Classifier for Sports Video Classification
Prisana Mutchima, Nattha Phiwma (Suan Dusit Rajabhat University)  
Parinya Sanguansat (Panyapiwat Institute of Management)

IS-12-059  A classification model using both frequent patterns and sequential patterns and sequential
patterns
Mao NISHIGUCHI, Hiroyuki MORITA (Osaka Prefecture University)

IS-12-060  Detection of Abnormal Situations Based on Comprehensive Flows
Tatsuya Gibo (Osaka Prefecture University)
Shigeki Aoki, Takao Miyamoto, Michifumi Yoshioka(Osaka Prefecture University)

IS-12-061  Automatic Extraction of Videos of Interest and Regions of Interest from Images of
Surveillance Cameras by Distribution in Comprehensive Flows
Tatsuya Gibo (Osaka Prefecture University)
Shigeki Aoki, Takao Miyamoto, Michifumi Yoshioka(Osaka Prefecture University)

IS-12-062  An Acceleration and Magnetic Sensor Fusion Technique for Range of Motion Rehabilitation
Pongwat Poomchoompol, Surapa Thiemjarus (Thammasat University)
Ithipan Methasate, Sanparith Marukatat (National Electronics and Computer Technology Center)

Session 2: System Modeling
IS-12-063  TOWARDS AN IT QUALITY MATURITY MODEL
Juan José Sánchez, Eugenio Fernández, Antonio Moratilla(University of Alcalá)

IS-12-064  Service Providers Perceptions of Japan’s E-Government Services Using the
Importance-Performance (IPA) Model
Wong Meng Seng (Nottingham University Business School)
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Session 5: Knowledge Management and Engineering

IS-12-079 THE DEVELOPMENT OF AN ERGONOMICS OSCILLATION MODEL
Thanwadee Chinda, Chaiwat Manasakunkit, Thanaphat Suethrong, Woraphong Hongpinyo
(Thammasat University)

IS-12-080 An Ontology-based Knowledge as a Service Framework: A Case Study of Developing a
User-centered Portal for Home Recovery
Marut Buranarach, Thepchai Supnithi, Passakon Prathombutr(NECTEC)

IS-12-081 Ontologies for Psychiatry: What have been done so far?
Wachirapon Arunothong (Lampang Hospital, Thailand)
Boontawee Suntisirivaraporn(Thammasat University)

IS-12-082 The Preliminary Observations on a Simulated Environment for Enhancing Foreign Language
Conversation Skills
Tunyawat Somjaitaweeporn (Panyapiwat Institute of Management)

Session 6: Software Development Methodology

IS-12-083 Agile Development Approach Based on BPM and SOA for Flexible and Efficient System
Development
Michiko Oba, Taku Yamaguchi(Future University Hakodate)

IS-12-084 Matching Exception Class Hierarchies between .NET and Java Environments
Pawel Kaczmarek, Julian Szyma´nski (Gda´nsk University of Technology)

IS-12-085 Stress Level on Global Software Projects using Waterfall and Scrum: A Preliminary
Comparison
Christelle Scharff(Pace University)
Samedei Heng(Université catholique de Louvain)
Vidya Kulkarni(University of Delhi)

Session 7: Text Processing

IS-12-086 Consistency Checking System of Numerical Content
Lei Zhang, Lei Shang, Xuan Zhang, Kenji Baba (Hitachi (China) Research & Development
Corporation)
Yoji Taniguchi(Hitachi, Ltd.)

IS-12-087 Generation of Hen-ai Map from Search Log for Foreign Language Learning
Youhei Inokuchi, Toshihiko Sakai, Chengjiu Yin, Sachio Hiokawa (Kyushu University)

IS-12-088 Toward Multi-Lingual Knowledge Extraction from Travelers’ Reviews
Kiyota Hashimoto(Osaka Prefecture University)
Kazuhiro Takeuchi(Osaka Electro-Communication University)
Makoto Okada(Osaka Prefecture University)
Sachio Hirokawa(Kyushu University)

IS-12-089 Proposal of Directed FACT-Graph Based on Association Rule
Ryosuke Saga(Osaka Prefecture University)

Session 8: Educational Engineering and e-learning

IS-12-090 ADULT LEARNERS’ MOTIVATIONS TO ADOPT MOBILE LEARNING
Felix B. Tan (Auckland University of Technology)
Kamarul Faizal Hashim (Universiti Utara Malaysia)
Ammar Rashid (Auckland University of Technology)

IS-12-091 Data Flow Design for Distributed e-Learning Management System
Thongchai Kaewkiriya (Thai Nichi Institute of Technology)
Hiroshi Tsuji (Osaka Prefecture University)
Prompting Internal Self-conversation Enhances Learning by Discussion to Train Meta-cognitive Skills
Kazuhisa Seta (Osaka Prefecture University)
Cui Liang, Mitsuru Ikeda (Japan Advanced Institute of science and technology)
Masahiko Okamoto, Motohide Umano (Osaka Prefecture University)

Development of a Motivational Material Using Visual Feedback to Bring Technical College Students Closer to Control Engineering
Rahok SAM ANN (Oyama National College of Technology)
Shigeji OSAWA (Utsunomiya University)
Hirohisa ONEDA (Yuge National College of Maritime Technology)
Takuya MATSUDA, Koichi OZAKI (Utsunomiya University)

Session 9: Information Technology for Service Science

Development of a Video Field-work Tool for Analyzing Office Work
Youji Kohda (Japan Advanced Institute of science and technology)
Kohei Matsumura (Future University Hakodate)

An Acronym-based Candidate Generation Technique for Virtual Keyboard on Smartphone: A Preliminary Report
Nirattaya Khamsemanan, Cholwich Nattee (Thammasat University)

A Fuzzy-Relation Approach for Name-Alias Identification in Thai News Articles
Thawatchai Suwanapong, Thanarak Theeramungkong, Ekawit Nantajeewarawat (Thammasat University)

FINDING CURVES'S CONVERGENCE USING DELAUNAY SEARCH
Thomas Bornschlegel (Ludwig Maximilian University of Munich)
Nittaya Muangnak, Pakinee Aimmanee, Stanislav S. Makhanov, Bunyarit Uyyanonvara (Thammasat University)

Online Traffic Information Retrieving for a Driver using Speech Recognition including Enhancement Methods
Surasak Boonkla, Pakinee Aimmanee (Thammasat University)
Chai Wutiwiwatchai (National Electronics and Computer Technology Center Patumthani)
Hiroaki Kunieda (Tokyo Institute of Technology)

Session 10: Information Technology for Service Science

SMS Solutions to Improve Students’ Life (Case Study at Royal University of Phnom Penh)
Vanra IENG, Chanthong Bormony (Royal University of Phnom Penh)
Christelle Scharff (Pace University)

TOWARDS A NATIONAL ATLAS - GEO WEB SERVICE
Bormony Chanthong (Royal University of Phnom Penh)
Köbben B.J.Barend, Kraak M.J.Menno-Jan (University of Twente)

A Novel Precoding Algorithm for MU-MIMO Based Downlink Systems
Puthnith Var (Inha University, Royal University of Phnom Penh)
Robin Shrestha, Jae Moung Kim (Royal University of Phnom Penh)
Jin Hyung Oh (Electronics and Telecommunications Research Institute)

Wi-Fi Based Room Detection using a Bayesian Network
Krittameth Techasrisaksakul, Surapa Thiemjarus (Thammasat University)

Poster Session
From Idea to Deployment in Students' Global Software Development Projects: The Case of an Education App for First Grade Pupils in Senegal
Christelle Scharff (Pace University)
Olly Gotel
Vidya Kulkarni (University of Delhi)
Serene Su
Chun Hei Cheung, Abdoulaye Noumoumy Diao, Soda Niang (SenMobile)
Knowledge Creation Process Support for Collaborative Learning Using a Virtualized Server
Naoya Yamasaki, Hiroyuki Kojima (Hiroshima Institute of Technology)
English Words Learning Environment for University Students of Science and Technology by Using a Push-Based e-Learning System
Shimpei Matsumoto, Masanori Akiyoshi (Hiroshima Institute of Technology)
Tomoko Kashima (Kinki University)
Computationally-efficient Gesture and Activity Recognition using Wrist-worn Accelerometer
Akiyoshi Taguchi, Takuya Maekawa(Osaka University)
Behavior Recognition with Environmental Sound: A Perspective for Participatory Sensing Architecture
Kun Zhang, Takuya Maekawa(Osaka University)
Role-based Group Activity Recognition Model for Multiple Mobile Phone Users
Tomoya Hirano, Takuya Maekawa(Osaka University)
Proposal for a management system for a project with uncertainty
Taku Yamaguchi, Michiko Oba, Osamu Takahashi (Future University Hakodate)
High-speed Multiview Video Coding for Embedded System
Kazutaka Takeuchi, Ryusuke Miyamoto, Takao Onoye(Osaka University)
Development of a Management Function in Farmers Information System to Obtain Skillful Farmers' Knowledge
Tomoko Kashima, Tatsuo Matsutomi (Kinki University)
Shimpei Matsumoto (Hiroshima Institute of Technology)
Hiroshi Iseda (Agricultural Products Distribution Research Institute)
Performance improvement of channel estimation for OFDM baseband transceiver with dynamic subcarrier selection technique
Yuya Iwasaki, Masahide Hatanaka, Takao Onoye (Osaka University)
MODERN ORGANIZATIONAL INFORMATION SYSTEMS: DISTRIBUTED AND ANALYTIC ORIENTATION
Peter Géczy, Noriaki Izumi, Shotaro Akaho, Kôiti Hasida( National Institute of Advanced Industrial Science and Technology)
FROM CLINICAL TO GENOMICS DATA IN HEPATITIS STUDY
Tu Bao Ho(Japan Advanced Institute of Science and Technology)
Katsuhiko Takabayashi, Tatsuo Kanda(Chiba University Hospital)
Saori Kawasaki, Le Thi Nhan, Bui Ngoc Thang(Japan Advanced Institute of Science and Technology)
Toward Authorship Detection based on Datamining
Seiko Takamizawa, Hiroshi Sugimura, Masaki Fujisawa, Kazunori Matsumoto(Kanagawa Institute of Technology)
Finding No Over-fitting Variables for Predicting Nurse-call Contents
Katsuya Shimabukuro, Yukie Majima(Osaka Prefecture University)
Sentiment Analysis of Questionnaire Survey to Improve OJT in Agricultural High Schools in Japan
Makoto Okada (Osaka Prefecture University)
Teruo Akai (Tokushima Chamber of Agriculture)
Kiyota Hashimoto (Osaka Prefecture University)
Joint Angles Based Gait Analysis for Human Identification by Using Kinect
Satoshi YOSHIDA and Masao IZUMI(Osaka Prefecture University)
Survey on the Use of ICT Tools for Dementia Care of Elderly People — Analysis through from Ichushi and PubMed —
Miwa YAMAMOTO, Shizue MIZUNO (Kyoto Koka Women’s University)
Yasuko MAEKAWA, Tomoharu NAKASHIMA (Osaka Prefecture University)
A Khmer Optical Character Recognition Based on Rotation Invariant of Fourier Descriptors
Vourchteang Sea, Sakey Saly, Marry Kong( Royal University of Phnom Penh)
A STUDY ON SVM-BASED HAND WRITEN KHMER CHARACTER RECOGNITION SYSTEM
Sokphal Ly, Nguonly Taing (Royal University of Phnom Penh)
Online Handwriting Khmer Character Recognition Using HMM-based Sequence Classification
Ratanak Chan, Nguonly Taing (Royal University of Phnom Penh)
Khmer Unicode Text Segmentation Using Maximal Matching
Chanveasna Pen, Nguonly Taing(Royal University of Phnom Penh)
Trace Order and Normalized Orientation Preprocessing Technique for Independent Writer in Online Khmer Handwriting Recognition
Sokheng Sam, Nguonly Taing (Royal University of Phnom Penh)
A Combined Edge Detection and Template Matching for Khmer Printed Character-set Recognition

Setha Iech, Nguonly Taing (Royal University of Phnom Penh)
Agent-based Learning Framework for Enhancing the Study on Logical Thinking of Business Management

Masanori Akiyoshi(Hiroshima Institute of Technology)
AUTOMATION SYSTEM FOR SCHOLARSHIP ALLOCATION FOR MINISTRY OF EDUCATION, YOUTH AND SPORT OF CAMBODIA
Chandarong Nuon, Channak Chhon, Saovorak Khoy, Vila Srun, Des Phal (Royal University of Phnom Penh)
INTERACTIVE VIRTUAL MUSEUM OF CAMBODIA BASED ON 3D ARCHITECTURAL MODEL

Sopheak Han(Royal University of Phnom Penh)
Pheakdey Nguonphan(Heidelberg University)
Sopagna Veng(Royal University of Fine Arts)
The Adoption of Private Cloud Computing for University: A Case Study of Eucalyptus at Royal University of Phnom Penh
Chamnan Keo, Bunna Kal, Vourchteang Sea, Marry Kong(Royal University of Phnom Penh)

Short paper
IS-12-103 A Methodology for Software Development Support based on Service Value Co-creation
Noriko Wada, Michitaka Kosaka(Japan Advanced Institute of Science and Technology)

IS-12-104 The Evaluation Framework of Trade Facilitation for Cross Border in East-West Economic Corridor
Nitipon Tansakul, Suthathip Suanmali, Veeris Ammarapala(Thammasat University)

IS-12-105 Unit Commitment In Power Operation Planning and CO2 Emission Constraints Consideration
Nuchjarin Intalar, Apirath Phusittrakool, Chawalit Jeenanunta (Thammasat University)

IS-12-106 MULTIMEDIA SERVICES FOR KRABI-KRABONG LEARNING
Datchakorn Tancharoen(Panyapiwat Institute of Management)

IS-12-107 A Preliminary Report on Applying Density Function for Positive and Unlabeled Learning on Text Categorization
Cholwich Nattee, Nirattaya Khamsemanan (Thammasat University)
Masayuki Numao (Osaka University)

IS-12-108 A Framework to Determine the Relationship between Skid Resistance Number and the Number of Accidents A Case Study on Thailand’s Expressway
Anuwat Yamgosum, Veeris Ammarapala, Suthathip Suanmali (Thammasat University)

Session 11: Image Processing

IS-12-109 EASY TO CUT PAPERCRAFT BASED ON CUBE ARRANGEMENT SHAPE
Vasutan Tunbunheng (Panyapiwat Institute of Management)

IS-12-110 Accurate Visual Stimulus Presentation Software for EEG experiments
Malypoeur Plong(GROUP T – Leuven Engineering College, Royal University of Phnom Penh)
Kai Shenbxt(GROUP T – Leuven Engineering College)
Marjin Van Vliet, Arne Robben, Marc Van Hulle(KU Leuven)
Luc Geurts(GROUP T – Leuven Engineering College)

IS-12-111 A study on Online Handwriting Recognition for Khmer Consonants Using LipiTk Testbed
Sokphath Ly, Nguonly Taing(Royal University of Phnom Penh)

IS-12-112 Fuzzy Classification Method of Objects Images Documents
Sovila Srun, Des Phal(Royal University of Phnom Penh)

IS-12-113 3D SCANNING FOR VIRTUAL REASSEMBLY OF BANTEAY CHHMAR TEMPLE STONE BLOCKS
Seyha Song(Royal University of Phnom Penh)
Pheakdey Nguonphan (Heidelberg University)
Des Phal (Royal University of Phnom Penh)
### Session 12: System Architecture

**IS-12-114**  
Semi-Symmetric Active-Active Storage Controllers for VM Load Balancing Environment — Architecture and Performance Evaluation —  
Naoto Matsunami, Junji Ogawa, Yusuke Nonaka, Yasunori Kaneda, Toshiaki Arai (Hitachi, Ltd.)  
Hiroshi Tsuji (Osaka Prefecture University)

**IS-12-115**  
Improvement of performance and reduction of deduplication backup system using multiple layered architecture  
Mikito Ogata (Hitachi Computer Peripherals Co., Ltd.)  
Norihisa Komoda (Osaka University)

**IS-12-116**  
GENETIC ALGORITHM-BASED SPARSE MATRIX ITERATIVE SOLVERS FOR EFFICIENT SIMULATION PLATFORMS  
Ken Naono (Hitachi Asia Malaysia)  
Nordin Zakaria (Universiti Teknologi PETRONAS)  
Takao Sakurai (Hitachi Ltd.)  
Anindya Jyoti Pal (Universiti Teknologi PETRONAS)  
Nobutoshi Sagawa (Hitachi Asia Ltd.)

**IS-12-117**  
SENSOR LOCATION OPTIMIZATION BASED ON CORRELATION ANALYSIS OF THERMAL BEHAVIOR IN CAMPUS GRID — TOWARD GREENING OF CAMPUS GRID —  
Jun Okitsu, Ken Naono (Hitachi Asia Malaysia)  
Low Tang Jung, Nordin Zakaria (Universiti Teknologi PETRONAS)

**IS-12-118**  
RESOURCE PUBLIC KEY INFRASTRUCTURE (RPKI) “A TRADE OFF BETWEEN SECURITY AND FREEDOM”  
Ashish Kapahi, Sureswaran Ramadass (Universiti Sains Malaysia)  
Raja Kumar Murugesan (Taylor’s University)

### Session 13: Enterprise Information Systems

**IS-12-119**  
ICT, Tourism and Poverty Reduction: a case study in the Siem Reap-Angkor region, Cambodia  
Helena Grunfeld, Nara Mao, Terry de Lacy, John Houghton (Victoria University)

**IS-12-120**  
Information Exchange Support System using RFID Tags and Digital Pens  
Hiroyuki Kojima, Tatsufumi Shimizu, Syunsuke Namiki (Hiroshima Institute of Technology)

**IS-12-121**  
Understanding ERP User Perceptions within a Saudi Context: A Case Study  
Hisham Alhirz, A. S. M. Sajeev (The University of New England)

**IS-12-122**  
AN APPLICATION OF DRUG MANAGEMENT INFORMATION SYSTEM: A CASE STUDY OF REPRODUCTIVE AND CHILD HEALTH ALLIANCE (RACHA) ORGANIZATION IMPLEMENTATION  
Sornew Ngim, Beanbonyka Rim, Marry Kong (Royal University of Phnom Penh)

**IS-12-123**  
Cooperative Estimation of Distribution Algorithm for Flexible Job Shop Problem with Configurable Machines  
Xinchang Hao, Haowen Lin, Jing Tian, Tomohiro Murata (Waseda University)

◎ 講演時間 1件当り30分（質疑応答5分を含む）