# 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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平成 24 年 12 月 6 日 (木)~平成 24 年 12 月 8 日 (土)

王立プノンペン大学 所

(Russian Federation Boulevard, Toul Kork, Phnom Penh, Cambodia.)

テーマ "The First Asian Conference on Information Systems"

12月6日 13:30-15:30

#### **Session 1: Pattern Recognition**

Adaptive Locally Linear Embedding For Face Hallucination IS-12-056

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)

Mao NISHIGUCHI, Hiroyuki MORITA (Osaka Prefecture University)

IS-12-059 A classification model using both frequent patterns and sequential patterns and sequential

patterns

IS-12-060 Detection of Abnormal Situations Based on Comprehensive Flows Tatsuya Gibo (Osaka Prefecture University)

Eri Kuzumoto(NEC)

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)

Eri Kuzumoto(NEC)

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 Thiemiarus (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 Japans E-Government Services Using the Importance-Performance (IPA) Model

Wong Meng Seng (Nottingham University Business School)

	Hideki Nishimoto, Yasuyuki Nishigaki (Ryukoku University) Stephen Jackson (Southampton University)
IS-12-065	What's my Personal Spam Threshold (PeST)? Towards Spam Filtering as Interactive Experience
	Christopher Lueg, Samuel Martin, Andrew Orange, Vishv Malhotra (University of Tasmania)
IS-12-066	Bias Effect on Iterative Spiral Conjoint Analysis Adrien Vella, Dennis Castel, Hiroshi Tsuji, Ryosuke Saga (Osaka Prefecture University)
IS-12-067	Development of DAQ System for Ultrasonic Test for Defect Detection  N. Wongsuwan, W. Kongprawechnon, R. Sahamitmongkol (Thammasat University)
	S. Komolavanij (Panyapiwat Institute of Management)
IS-12-068	ITIL, COBIT and EFQM: How to use them in conjunction Juan José Sánchez, Eugenio Fernández, Antonio Moratilla(University of Alcalá)
IS-12-069	Stochastic Model of Interest Rate in Microcredit
	Pheakdei Mauk (Royal University of Phnom Penh) Marc Diener (University of Nice Sophia-Antipolis)
Session 3: S	Service Design, Management and Innovation
IS-12-070	A Recursive Model for Users' Value Co-creation based on Japanese Omotenashi Service
	H. M. Belal, Kunio Shirahada, Michitaka Kosaka(Japan Advanced Institute of science and
	technology)
IS-12-071	A MATHEMATICAL MODEL OF SERVICE VALUE BASED ON A SERVICE FIELD CONCEPT
	Minh Chau Doan, Kunio Shirahada, Michitaka Kosaka (Japan Advanced Institute of science
	and technology)
	Jing Wang (Beihang University)
IS-12-072	ERGONOMIC DELIVERY CREW ASSIGNMENT WITH PHYSICAL WORKLOAD BALANCING
TG 48 0 <b>7</b> 0	Prachya Boonprasurt, Suebsak Nanthavanij (Thammsat University)
IS-12-073	AN ANALYSIS OF INFLUENCE FACTORS FOR HOTELS INNOVATION: THE CASE OF GREATER BANGKOK, THAILAND
IS-12-074	Chawalit Jeenanunta, Narissara Visavanont(Thammsat University) FACEBOOK AS SOCIAL MEDIA FOR BUSINESS: AN EMPIRICAL STUDY
	Apiwan Thamsamisorn, Nattharika Rittippant (Sirindhorn International Institute of
	Technology)
Session 4: 1	Datamining
IC 12 075	A Study for Analysis of User Dehavior in The Free Magazine Website for Wesser
IS-12-075	A Study for Analysis of User Behavior in The Free Magazine Website for Women Hiroki Kanzaki, Shingo Otsuka (Kanagawa Institute of Technology)
IS-12-076	Access Log Analysis for EC Service with PageRank
IS-12-077	Tomohiro Koketsu, Hidekazu Yanagimoto, Michifumi Yoshioka (Osaka Prefecture University) An Anomaly Detection Method on Web-based System by Certification of Structural Change on Autoregressive Model
	Hiroshi Ohno, Masaki Samejima (Osaka University)
	Masanori Akiyoshi (Hiroshima Institute of Technology) Norihisa Komoda (Osaka University) Matsuki Voshino (Hitashi, Ltd.)
IS-12-078	Matsuki Yoshino (Hitachi, Ltd.) DEA evaluation method based on superiority and inferiority degrees
	Kazushige Inoue, Ryouta Gejima, Hiroshi Tsuji(Osaka Prefecture University) Shingo Aoki(Hiroshima Institute of Technology)

### **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?
	Wachiraporn Arunothong (Lampang Hospital, Thailand)
	Boontawee Suntisrivaraporn(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)
	Samedi 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)

	Ryosuke Saga(Osaka Prefecture University)
Session 8: E	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)

IS-12-092 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) IS-12-093 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** IS-12-094 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) IS-12-095 An Acronym-based Candidate Generation Technique for Virtual Keyboard on Smartphone: A **Preliminary Report** Nirattaya Khamsemanan, Cholwich Nattee (Thammasat University) IS-12-096 A Fuzzy-Relation Approach for Name-Alias Identification in Thai News Articles Thawatchai Suwanapong, Thanaruk Theeramunkong, Ekawit Nantajeewarawat (Thammasat University) IS-12-097 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 IS-12-098 **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** IS-12-099 SMS Solutions to Improve Students' Life (Case Study at Royal University of Phnom Penh) Vanra IENG, Chanthong Bormy (Royal University of Phnom Penh) Christelle Scharff (Pace University) IS-12-100 TOWARDS A NATIONAL ATLAS - GEO WEB SERVICE Bormy Chanthong (Royal University of Phnom Penh) Köbben B.J.Barend, Kraak M.J.Menno-Jan (Univerity of Twente) IS-12-101 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) IS-12-102 Wi-Fi Based Room Detection using a Bayesian Network

#### **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 Noumounthi Diao, Soda Niang(SenMobile)

Krittameth Teachasrisaksakul, Surapa Thiemjarus(Thammasat University)

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 Univeristy)

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)

Des Phal (Royal University of Phnom Penh)

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

Snort 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 Co <sub>2</sub> 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 Shenbx(GROUP T – Leuven Engineering College)
	Marijn 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)

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 (HUniversiti Teknologi PETRONAS
IS-12-117	Nobutoshi Sagawa (Hitachi Asia Ltd. SENSOR LOCATION OPTIMIZATION BASED ON CORRELATION ANALYSIS OF
13-12-11/	
	THERMAL BEHAVIOR IN CAMPUS GRID —TOWARD GREENING OF CAMPUS GRII
	- Lym Olvitov, Man Nagna (Hitashi Asia Malaysia
	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
15-12-110	
	SECURITY AND FREEDOM"
	Ashish Kapahi, Sureswaran Ramadass (Universiti Sains Malaysia
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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 EALTH 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)