

IIAI AAI 2017 Congress Program

ACIS ACIT/BCD/CSII Conferences Program

July 9 (Sun), 2017

1:00PM-2:40PM

LTLE-1

Room A (Auditorium)

Session Chair: Kosuke Kaneko (Kyushu University, Japan)

- An Experimental Evaluation of A Cloud-based Virtual Computer Laboratory Based on OpenStack
 - Mohammad Nazim Kabiri and Muhammad Wannous
- Gamified Digital Math Lessons for Lower Primary School Students
 - Tomislav Jaguš, Ivica Boticki, Vedran Mornar and Hyo-Jeong So
- Development and Evaluation Experiment of Display Media using VR for Art Appreciation Learning
 - Shoko Usui, Katsumi Sato and Tatsuya Horita
- Effectiveness of Experiential Learning for Keeping Knowledge Retention in IoT Security Education
 - Kosuke Kaneko

SCAI-1

Room B

Session Chair: Katsuhide Fujita (Tokyo University of Agriculture and Technology, Japan)

- Internal Fault Classification Algorithm in Power Transformer Based on Discrete Wavelet Transform and Fuzzy Logic
 - Santipont Ananwattanaporn, Chaiyan Jettanasen, Chaichan Pothisarn, Atthapol Ngaopitakkul and Dimas Anton Asfani
- Classification of Fault Type on Loop-Configuration Transmission System using Support Vector Machine
 - Jittiphong Klomjit and Atthapol Ngaopitakkul
- Application of fuzzy goal programming to wind turbine selection with multiple criteria - a study of three potential sites in Saudi Arabia
 - Salman Khan and Shafiqur Rehman

DSIR-SS1 & DSIR-SS 3-1

Room C

Session Co-chairs: Tsutomu Ogawa (Yamaguchi National University, Japan), Keisuke Honda (The Institute of Statistical Mathematics, Japan)

- Study on educational effect inspection of new subject information security and morals
 - Tsutomu Ogawa
- The Possibility for the Active Use of Smart Devices in University Education
 - Nasen Chen and Yasuo Yamashita
- Possibility of Felt Ball Math
 - Mayumi Ueno

SISS-SS2

Room F

Session Chair: Yasushi Narushima (Yokohama National University, Japan)

- Using Human-Gaming As Cases for Strategic Management Theory
 - Ryo Sato and Hirotaka Sunaguchi
- A cellular automata simulation for railway services
 - Touma Niino
- Impact of Environmental Uncertainty and Organizational Mechanism on Manufacturing Flexibility through

Absorptive Capacity

- Ylias Razafindrazaka, Zhi Li and Yoshiki Matsui
- Economic Experiments in YBG -The case of manufacturing industry game-
 - Yasushi Narushima

EAIS-SS1

Room G

Session Chair: Tsutomu Konosu (Chiba Institute of Technology, Japan)

- A study on the cognitive process of isolating language for developing software user interface
 - Phenpimon Wilairatana, Chanongkorn Kuntonbutr, Koichi Mizutani and Tsutomu Konosu
- The management vision for innovation and human resource development affecting new markets and new products development
 - Chanongkorn Kuntonbutr, Natnarong Jaturat, Phenpimon Wilairatana and Tsutomu Konosu
- A Study of Linguistic Strategies in the Global Communication
 - Genki Okamoto, Koichi Mizutani and Tsutomu Konosu
- A study on the influence of personality traits on global communication abilities.
 - Ryo Sakabe, Masaki Gushikawa and Tsutomu Konosu

3:00PM-4:20PM

LTLE-2

Room A (Auditorium)

Session Chair: Yuichi Ono (University of Tsukuba, Japan)

- Effects of Design Factors of Game-based English Vocabulary Learning APP on Learning Performance, Sustained Attention, Emotional State, and Memory Retention
 - Chih-Fan Hsu, Chih-Ming Chen and Ding Cao
- Effect of Human Agent Interaction Improves Self-esteem and Students' Motivation
 - Ellina Rienovita, Masashi Taniguchi, Masato Kawahara, Yugo Hayashi and Yugo Takeuchi
- Effects of Collaborative Multimedia Annotations on Elementary School Students' Vocabulary Learning Performance
 - Ying-You Lian, Chih-Ming Chen and Yi-Rong Li

EAIS-1

Room B

Session Chair: Shuichiro Yamamoto (Nagoya University, Japan)

- Estimation of Risk Countermeasure Effects Based upon Project-Behavior Simulation System
 - Ayaka Oshima and Koji Okada
- Risk Management for Digital Transformation in Architecture Board :A Case Study on Global Enterprise
 - Yoshimasa Masuda, Seiko Shirasaka, Shuichiro Yamamoto and Thomas Hardjono
- Risk Words Suggestion for Information Security Audit by Bayesian Inference
 - Naoki Satoh and Masaki Samejima

DSIR-SS1 & DSIR-SS3-2

Room C

Session Co-chairs: Tsutomu Ogawa (Yamaguchi National University, Japan), Keisuke Honda (The Institute of Statistical Mathematics, Japan)

- Do colleges misreport data to university rankings? An analysis using Benford's Law
 - Stephen R. Porter and Nichole D. Smith
- A Study of the Article Citation Network in Statistics Research Community
 - Frederick Kin Hing Phoa and Livia Lin-Hsuan Chang
- Dominating Centrality Set: A New Measure on the Network Coverage of Influential Center Nodes
 - Yuan-Lung Lin and Frederick Kin Hing Phoa

CSII-SS6

Room D

Session Chair: Masashi Kawaguchi, National institute of Technology, Suzuka College

- Analog Learning Neural Circuit with Switched Capacitor and the Design of Deep Learning Model

- Masashi Kawaguchi, Naohiro Ishii, Masayoshi Umeno
- Characterization and Generation of Threshold Functions Based on Nearest Neighbor Relations
 - Naohiro Ishii, Ippei Torii, Kazunori Iwata, Kazuya Odagiri, Toyoshiro Nakashima
- Application of Asymmetric Networks to Motion Detection and Generating Independent Subspaces
 - Naohiro Ishii, Toshinori Deguchi, Masashi Kawaguchi, Hiroshi Sasaki
- Load Experiment of the vDACS Scheme in case of the 300 simultaneous connection
 - Kazuya Odagiri, Shigo Shimizu, Naohiro Ishii

CSII-Workshop 1

Room E

Session Chair: Minoru Uehara (Toyo university)

- Mist computing: Linking cloudlets to fogs
 - Minoru Uehara
- Self Recognition and Fault Awareness in OpenFlow Mesh
 - Suguru Yasui, Minoru Uehara
- Prototyping Sports Mental Cloud
 - Xu Gao, Minoru Uehara, Koichiro Aoki, Chieko Kato

SISS-1

Room F

Session Chair: Satoshi Takahashi (The University of Electro-Communications, Japan)

- A Multi-Agent Simulation of the Formation of Society-Level Phenomena based on Group Cognition Model
 - Dipta Mahardhika, Taro Kanno and Kazuo Furuta
- A Human Subject Experiment for Online Mechanism in Dynamic Environment Auctions
 - Satoshi Takahashi

4:40PM-6:45PM

LTLE-3

Room A (Auditorium)

Session Chair: Yuichi Ono (University of Tsukuba, Japan)

- Learning Process Analysis Based on Sequential Pattern Mining and Lag Sequential Analysis in a Web-based Inquiry Science Environment
 - Fang-Chun Lin, Chih-Ming Chen and Wen-Fang Wang
- A Collaborative Reading Annotation System for Promoting Reading Performance
 - Chung Chang, Chih-Ming Chen and Fang-Ya Chen
- An English Diagnosis and Review System based on Brainwave Attention Recognition Technology for the Paper-based Learning Context with Digital-Pen Support
 - Ya-Ling Huang, Chih-Ming Chen and Mi Lin
- Relationship between Good Grades and Brain Waves
 - Yoshihiro Kokubo and Yoshihiko Shoji

ESKM-1

Room B

Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- Acquisition of Multiple Graph Structured Patterns by an Evolutionary Method using Sets of TTSP Graph Patterns as Individuals
 - Yuuki Yamagata, Tetsuhiro Miyahara, Yusuke Suzuki, Tomoyuki Uchida, Fumiya Tokuhara and Tetsuji Kuboyama
- The mobile health life domain and its contribution to overall quality of life: A case study of Japanese Internet users
 - Fumiyo N. Kondo and Qazi Mahdia Ghyas
- Detecting Communication Situation Using Smartphone Sensors -- toward Real SNS --
 - Masaki Maruta and Tsunenori Mine
- Iterative Feature Selection Based on Binary Consistency
 - Sho Shimamura and Kouichi Hirata

DSIR-SS4**Room C**

Session Chair: Michiyo SHIMAMURA (Japan Agency for Marine-Earth Science and Technology, Japan)

- Does Home Field Advantage Influence Graduate Students' Academic Performance? Evidence from NTHU and non-NTHU Undergraduate Alumni
 - Shih-Yung Chiu and Eric S. Lin
- IR survey using education support system: a trial of obtaining systematic list of courses in environmental science
 - Shota Mitsui, Michiyo Shimamura and Yasuhiro Yamanaka
- Utilization of the Student e-Portfolio in the Graduate Education ~ The case report of “Nitobe School Program” in Hokkaido University ~
 - Shotaro Imai, Michiyo Shimamura, Hisashi Haga, Yukinori Kobayashi, Ankit Ravankar and Yasuhiro Yamanaka
- What is the most suitable English test for the Graduate School students in Research University of Japan? ~ The case report from the trial of “Nitobe School Program” in Hokkaido University” ~
 - Michiyo Shimamura and Yasuhiro Yamanaka
- Recent program of AIST Innovation School For the future innovation leader in global society
 - Masaaki Ichiki, Muneyasu Suzuki, Shouhei Mine, Hidekazu Saitoh, Ko-Ichi Sugawara, Yasuo Kanazawa and Ryuichi Naganawa

ACIT-SS3**Room D**

Session Co-Chairs: Kayo Iizuka (Senshu University, Japan), Jo Ito (Atomi University, Japan), Yasuki Iizuka (Tokai University Japan)

- Experiment and Evaluation of Effective Grouped Flipped Classroom
 - Katsuyuki Umezawa, Manabu Kobayashi, Takashi Ishidaz, Makoto Nakazawax and Shigeichi Hirasawa,
- Automated Essay Scoring System Based on Rubric
 - Megumi Yamamoto, Nobuo Umemura, Hiroyuki Kawano
- Development of "concrete" educational materials for mathematics on tablet PCs
 - Kenichi Fujii
- A Learning Material for Physics Experiment with High-Accuracy Using Computer Vision Technique
 - Gen nakagawa, Kenichi Fujii
- Study of a Multilingual Translation Process Using Statement Restriction Rules
 - Yuu NAKAJIMA, Kana TAJIMA, Yoshiyuki KITAJIMA, Reiko HISHIYAMA

BCD 1**Room E**

Session Chair: Masateru Tsunoda (Kindai University, Japan)

- Visualizing Shiga Prefecture using RESAS: cloud-based analysis system with government open big data
 - Jongchan Lee, Tetsuto Himeno, Shohei Shimizu, Takuma Tanaka and Akimichi Takemura
- Detection of Parkinson Disorder using Kinect arm movement - A computational based approach
 - *Sagarjit Dash and Ashutosh Mishra*
- Investigation of Coding Violations Focusing on Authorships of Source Files
 - Aji Ery Burhandenny, Hirohisa Aman and Minoru Kawahara
- Empirical Study of Fault-Prone Method's Name and Implementation: Analysis on Three Prefixes---Get, Set and Be
 - Sho Suzuki, Hirohisa Aman and Minoru Kawahara

BMOT-SS1**Room F**

Session Chair: Shimpei Matsumoto (Hiroshima Institute of Technology, Japan)

- Studying of Thai SMEs businesses in order to define the marketing strategy and enhance the competitiveness The case study: Bua Bhat Factory
 - Khanita Tumphasuwan
- Design and Development of a Web Service to Support Daily Life of Vulnerable Road Users in Suburban Residential Estates in Hiroshima City
 - Shimpei Matsumoto, Nobuyuki Ohigashi and Takashi Hasuike

- Construction of Investor Sentiment Index in the Chinese Stock Market
 - Yuxi Yang and Takashi Hasuike
- College students' part-time jobs: factors and challenges for future careers
 - Yueh-Chiu Wang and Chih-Jou Chen
- Robust Agricultural Supply Chain Management with Various Random and Fuzzy Parameters
 - Takashi Hasuike, Tomoko Kashima and Shimpei Matsumoto

ESKM-SS2

Room G

Session Chair: Yoko Nishihara (Ritsumeikan University, Japan)

- Data Analysis Support by Combining Data Mining and Text Mining
 - Tomoya Matsumoto, Wataru Sunayama, Yuji Hatanaka and Kazunori Ogohara
- Topic Switching System for Unfamiliar Couples in Face-to-Face Conversations
 - Yoko Nishihara, Kodai Yoshimatsu, Ryosuke Yamanishi and Satoshi Miyake
- A Generation Method of Back-channel Response to Let a Chatting bot Be a Member of Discussions in a Text-based Chat
 - Yoko Nishihara, Masaki Ikuta, Ryosuke Yamanishi and Junichi Fukumoto
- Can We Estimate Others' Friendships with Single Interaction Features on Twitter?
 - Ryosuke Yamanishi, Ryota Nozawa, Yoko Nishihara and Mitsuo Yoshida
- An Entity Disambiguation Approach for Entity Linking in Microblogs
 - Tomoaki Urata and Akira Maeda

July 10 (Mon), 2017

8:40AM-10:00AM

SCAI-2

Room A (Auditorium)

Session Chair: Tadachika Ozono (Nagoya Institute of Technology, Japan)

- Adaptive Multiobjective Differential Evolution Algorithms for Environmental/Economic Dispatch
 - Zhong-Yi Lin, Tsung-Che Chiang and Chen-Yu Lee
- Learning Variable Importance to Guide Recombination on Many-objective Optimization
 - Miyako Sagawa, Hernan Aguirre, Fabio Daolio, Arnaud Liefooghe, Bilel Derbel, Sébastien Verel and Kiyoshi Tanaka
- Collaborative Group Label Work System based on Web Technology
 - Syuuya Tanaka and Motoki Miura

LTLE-WS1-1

Room B

Session Chair: Jie Chi Yang (National Central University, Taiwan)

- On Integration of Social Activities and News Express-Based Learning in Construction Education
 - Yu-Chieh Wu and Jie Chi Yang
- Enhancing AR-based Science Exploration through Learning Cycle
 - Ming-Puu Chen and Jih -Wei Hsu
- Evaluating the effectiveness of English speaking and learning attitude for elementary students in a digital game-based learning environment
 - Fang-Chuan Ou Yang, Hsiao-Han Chen, Wen-Chi Vivian Wu and Jie Chi Yang

LTLE-WS1-2

Room C

Session Chair: Chih-Hung Lai (National Dong Hua University, Taiwan)

- An Inquiry blended SECI Model-based Learning Support Approach for Promoting Perceptions and Learning Achievement of University Students

- Krittawaya Thongkoo, Patcharin Panjaburee and Kannika Daungcharone
- Design and Evaluation of Question-generated programming learning system
 - Chih-Hung Lai, Jing-San Liang and Pham-Duc Tho
- Recommendation of Instructional Clips for HTML Learners Based on ID3 Algorithm
 - Ting-Chia Hsu and Kai-Zhong Chou

CSII-SS4

Room D

Session Chair: Kenji Funahashi, (Nagoya Institute of technology)

- Hearing-Dog Robot to wake People up using its Bumping Action
 - Yukihiro Yoshida, Daiki Sekiya, Tsuyoshi Nakamura, Masayoshi Kanoh, Koji Yamada
- Shape Recovery of Polyp from Endoscope Image Using Blood Vessel Information
 - Yuji Iwahori, Tomoya Suda, Kenji Funahashi, Hiroyasu Usami, Aili Wang, M. K. Bhuyan, Kunio Kasugai
- Development of congestion state guiding system for university cafeteria
 - Takafumi Doi, Hirotaka Itoh, Kenji Funahashi
- Cost Reduction of Creating Likelihood Map for Automatic Polyp Detection Using Image Pyramid
 - Tsubasa Ooto, Hiroyasu Usami, Yuji Iwahori, Aili Wang, Naotaka Ogasawara, Kunio Kasugai

BCD 2

Room E

Session Chair: Jong Chan Lee (Shige University, Japan)

- Two-mode Three-way Dominance Points Model for Periodic Dissimilarity
 - Jun Tsuchida and Hiroshi Yadohisa
- Generalized Structured Component Analysis for dissimilarity data and multivariate data
 - Kensuke Tanioka and Hiroshi Yadohisa
- Visualize the longitudinal big text data with a binary covariate
 - Shizue Izumi, Tetsuji Tonda, Noriyuki Kawano and Kenichi Satoh
- Performance Anomaly Detection using Datacenter Landscape Graphs
 - Olumuyiwa Ibidunmoye, Thijs Metsch, Victor Bayon-Molino and Erik Elmroth

ESKM-2

Room F

Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- Important User Group Based Web Service Recommendation
 - Lulan Yu, Min Gao, Xinyu Xiao, Xiang Li and Qingyu Xiong
- A Point-of-Interest Recommendation Method Using Location Similarity
 - Jun Zeng, Yinghua Li, Feng Li, Junhao Wen and Sachio Hirokawa
- Privacy Protection Technology and Access Control Mechanism for Medical Big Data
 - Narn-Yih Lee and Bing-Han Wu

LTLE-4

Room G

Session Chair: Yuichi Ono (University of Tsukuba, Japan)

- Cyber-Physical Production Systems: A Teaching Concept in Engineering Education
 - Daniela Antkowiak, Daniel Lütticke, Tristan Langer, Thomas Thiele, Tobias Meisen and Sabina Jeschke
- An Interactive Story-based Mobile Game Application to Diagnosing Learning Style and Learning Suggestion based on ILS
 - Charoenchai Wongwatkit, Sasithorn Chookaew, Kullawee Chaturarat and Chonlada Krutthakha
- The Development of the Mobile Situated Learning Application based on Microlocation Technology
 - Yu-Lin Jeng, Mu-Lan Hong and Hsin-Tse Lu

10:20AM-12:00PM

LTLE-WS1-3

Room B

Session Chair: Shu-Ling Wang (National Taiwan University of Science and Technology, Taiwan)

- A Learning Analytics Approach to Investigating the Impacts of Educational Gaming Behavioral Patterns on Students' Learning Achievements
 - Han-Yu Sung, Po-Han Wu, Gwo-Jen Hwang and Dai-Chi Lin
- Effects of integrating a situated gaming mechanism into an issue-quest flipped learning approach on undergraduate students' learning achievement and motivation in Chinese character course
 - Lin Wang, Chun-Chieh Wang, Hui-Chun Chu and Gwo-Jen Hwang
- Effects of a situated 3D computational problem-solving and programming game-based learning model on students' learning perception and cognitive loads
 - Tzu-Yin Hong and Hui-Chun Chu
- The role of visual/verbal cognitive styles and self-efficacy in online searching behaviors and performance in the text-based learning environment
 - Shu-Ling Wang and Mei-Xuan Kuo

LTLE-WS1-4

Room C

Session Chair: Tsung-Yen Chuang (National University of Tainan, Taiwan)

- Using Digital Game as Compiler to Motivate C Programming Language Learning in Higher Education
 - Kannika Daungcharone, Patcharin Panjaburee and Krittawaya Thongkoo
- A Development of Supervised-Online Personal Learning Environment: Examining Factors affecting Self-directed Learning and Conceptual Understanding Progression
 - Niwat Srisawasdi and Patcharin Panjaburee
- Designing a Digital Gamification Platform to Support Classroom Management
 - Ming-Shiou Kuo, Tsung-Yen Chuang, Shu-Yuan Tao and Jhong-Wei Yang
- Investigating the motivation between ubiquitous learning strategy and gender for basketball sport literacy
 - Tosti H. C. Chiang and Stephen J.H. Yang

CSII-SS3 & CSII-SS5

Room D

Session Co-Chairs: Kazuya Murata (Toyo university) & Kazunori Iwata (Aichi University)

- Improvement of "Multiple Sightseeing Spot Scheduling System"
 - Kazuya Murata, Takayuki Fujimoto
- Proposal and Development of Artificial Personality(AP) application using the "requesting" mechanism
 - Yosuke Kanai, Takayuki Fujimoto
- The realization of 3D modeling system for Japanese Origami
 - Risa Ogawa, Takayuki Fujimoto
- Detecting Outliers in Terms of Errors in Embedded Software Development Projects Using Imbalanced Data Classification
 - Kazunori Iwata, Toyoshiro Nakashima, Yoshiyuki Anan, Naohiro Ishii
- Automatic classification of remarks in Werewolf BBS
 - Takanori Fukui, Keisuke Ando, Toshihide Murakami, Nobuhiro Ito, Kazunori Iwata
- Design of Agent Development Framework for RoboCupRescue Simulation
 - Shunki Takami, Kazuo Takayanagi, Shivashish Jaishy, Nobuhiro Ito, Kazunori Iwata

ACIT-1& CSII

Room E

Session Chair: Tomohiko Takagi (Kagawa University, Japan)

- Risk Assessment of Security Requirements of Banking Information System Based on Attack Patterns
 - Krissada Rongrat, Twittie Senivongse
- Automated Risk Identification of CMMI Project Planning Using Ontology
 - Chanapan Rojrattanakorn, Wiwat Vatanawood
- Heuristic-Based Usability Evaluation Tool for Android Applications
 - Kwandee Phetcharakarn, Twittie Senivongse
- Heuristic Test Case Generation Technique Using Extended Place/Transition Nets
 - Tomohiko Takagi, Akinori Akagi, Tetsuro Katayama
- Improve Example-Based Machine Translation Quality for Low-Resource Language Using Ontology
 - Khan Md. Anwarus Salam, Setsuo Yamada, Tetsuro Nishino
- Implementation of Document Production Support System with Obsession Mechanism

- Ziran Fan, Takayuki Fujimoto

ESKM-3

Room F

Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- Equilibrium Decisions of a Dual Channel Supply Chain with the Cooperative Delivery Strategy
 - Shan Chen, Xu Wang, Yingbo Wu, Yun Lin, Longxiao Li and Qian Guo
- RB-storm:Resource Balance Scheduling in Apache Storm
 - De Xiang, Yingbo Wu, Pan Shang, Jiacheng Jiang, Jinhao Wu and Keqin Yu
- The Influence of Shilling Attacks with Different Attack Cycles
 - Feng Jiang and Renli Tian
- Analysis of Free Description in Lecture Questionnaires Using Word Rank Affiliation Probability
 - Asami Shiwaku, Nobuyuki Kobayashi and Hiromitsu Shiina

EAIS-2

Room G

Session Chair: Atsushi Shimoda (Chiba Institute of Technology, Japan)

- Adapting Storage Protocol Stack Using Custom File Metadata to Commodity Linux Servers
 - Takayuki Fukatani, Takahiro Nakano and Atsushi Sutoh
- An Evaluation of O-DA template
 - Nobuhide Kobayashi and Shuichiro Yamamoto
- Big Data Information of CNC Machine Tool Performed in Position Control Mode
 - Wen-Yang Chang and Sheng-Jhih Wu
- A Method of Setting the Order of User Story Development of an Agile - Waterfall Hybrid Method by Focusing on Common Objects
 - Atsushi Shimoda and Kazuyuki Yaguchi

1:10PM- 1:30PM

IIAI AAI 2017 Opening Ceremony

Room A (Auditorium)

1:30PM-3:15PM

Panel Discussion

Room A (Auditorium)

3:30PM-5:10PM

LTLE-WS1-5

Room B

Session Chair: Hui-Chun Chu (Soochow University, Taiwan)

- Effects of knowledge-based scaffolding interactive e-book on multiplication concept
 - Yu-Hsien Huang, Po-Han Wu, Ping-Lin Fan and Yu-Sheng Su
- Development of a mobile sleep-management system for improving students' lifestyles based on a self-regulated learning strategy
 - Yi-Meng Liu, Lin Wang, Chieh Yang and Hui-Chun Chu
- Learning achievements and attitudes in a Computer Science course: Activating students' Flipped learning via ICT technologies
 - Chieh Yang and Hui-Chun Chu
- EFL Teachers' Voice for Incorporating Email Keypal Exchange in Taiwan Primary Classroom
 - Yan-An Jou, You-Chuan Joni Chao and Wen-Chi Vivian Wu

LTLE-WS1-6

Room C

Session Chair: Niwat Srisawasdi (Khon Kaen University, Thailand)

- Development of Smartphone-based Inquiry Laboratory Lessons in Chemistry Learning of Solution and Concentration: An Evidence-based Practice
 - Sasivimol Premthaisong and Niwat Srisawasdi
- Using Self-explanation and Ontology for Providing Proper Feedbacks in a Programming Environment
 - Tzone I Wang and Cheng-Wei Yen
- Effects of Online Learning with Matching Learning Styles and Preferred Digital Media Types on University Students' Perceptions
 - Jirapipat Thanyaphongphat and Patcharin Panjaburee
- Digital Game-Based Learning for Enhancing Students' Academic Achievement, Learning Motivation, and Willingness to Communicate in an English Course
 - Yi-Ting Yeh and Hsiu-Ting Hung, Yu-Jen Hsu

DSIR-1

Room D

Session Chair: Pitambar Gautam (Hokkaido University, Japan)

- A new way of visualizing curricula using competencies: Cosine similarity, multidimensional scaling methods, and scatter plotting
 - Kunihiro Takamatsu, Katsuhiko Murakami, Takafumi Kirimura, Kenya Bannaka, Ikuhiro Noda, Mayumi Yamasaki, Raphael-Joel-Wei Lim, Kenichiro Mitsunari, Tadashi Nakamura and Yasuo Nakata
- The Study of Global Mobility of the Technology University Students
 - Yung-Chin Chiu, Chao-Hung Wang and Horng-Ren Tsai
- Early Detection of At-Risk Students Using Machine Learning Based on LMS Log Data
 - Nobuhiko Kondo, Midori Okubo and Toshiharu Hatanaka
- Course Recommender System for Student Enrollment using Augmented Reality
 - Sakuna Anuvareepong, Samitra Vimolratana, Nawachon Charoenprasoplarp and Supawadee Phooim

SCAI-3

Room E

Session Chair: Antonie Bossard (Kanagawa University, Japan)

- Improving Pitch Class Profile for Musical Chords Recognition Combining Major Chord Filters and Convolution Neural Networks
 - Suwatchai Kamonsantiroj, Lita Wannatrong and Luepol Pipanmaekaporn
- A Novel Overlapping Fingerprint Partition and Reconstruction based on Vector Flow Method
 - Kuo-Ming Hung, Li-Ming Chen and Wei-Li Lin
- A Performance Comparison of Pedestrian Detection Using Faster RCNN and ACF
 - Yeong-Hyeon Byeon and Keun-Chang Kwak
- Reversible System based on Block-PCA
 - Ching-Tang Hsieh, Ze-Guang Lin, Li-Ming Chen and Kuo-Ming Hung

SISS-SS3

Room F

Session Chair: Aya Ishigaki (Tokyo University of Science, Japan)

- Study on Multi-item Process Production System Considering Setup Time
 - Manabu Yamazaki, Aya Ishigaki and Munenori Kakehi
- Iterated Local Search Algorithm for Flexible Job Shop Scheduling
 - Aya Ishigaki and Shun Takaki
- Effect of Material Prices for Global Supply Chain Network with Trans-Pacific Partnership
 - Kengo Nakamura, Hiromasa Ijuin, Tetsuo Yamada, Aya Ishigaki and Masato Inoue
- Liner Physical Programming Oriented Approach of Reverse Supply Chain Network Design for Costs and Recycling Rate
 - Hiromasa Ijuin, Yuki Kinoshita, Tetsuo Yamada, Aya Ishigaki and Masato Inoue

6:00PM-8:00PM

IIAI AAI 2017 & ACIS ACIT/BCD/CSII Banquet

MeinSchloss Restaurant Hall

July 11 (Tue), 2017

8:30AM-10:40AM

LTLE-5

Room A (Auditorium)

Session Chair: Yuichi Ono (University of Tsukuba, Japan)

- Analysis and visualization of course material page views using a time series cross section and pivot table
 - Konomu Dobashi
- Research on Statistical Literacy Using the Japanese Textbooks
 - Seiji Maki and Tatsuya Horita
- The Influence of Online Academic Information Search on Students' Epistemic Change
 - Chih-Hung Ho and Yen-Lin Chiu
- Applying Auction Mechanisms to Designing a Chinese Reading Games for Keyword Selection and Summary Writing
 - Yuchao Ji, Hercy N.H. Cheng, Calvin C.Y. Liao, Wang-Chen Chang and Xuan Deng

SCAI-4

Room B

Session Chair: Shun Shiramatsu (Nagoya Institute of Technology, Japan)

- ANN-based Collaborative Sensor Calibration and GA-approach to Sensor Mutation Management
 - John Yoon
- Mixture Disturbances Identification for an SPC-EPC System
 - Yuehjen Shao and Po-Yu Chang
- Forecasting Daily Electricity Load by Wavelet Neural Networks Optimized by Cuckoo Search Algorithm
 - Jeng-Fung Chen and Quang Hung Do
- Body Physical Measurement using Kinect for Virtual Dressing Room
 - Naoyuki Yoshino

BMOT-1

Room C

Session Chair: Hidekazu Iwamoto (Josai International University, Japan)

- Does the Firm's Mimetic Motives affect the Customer's Self-determination Motivation? A Cross-level Integrative Perspective
 - Liao Kuo-Hsun and Chen Sheau-Hwa
- Kansei Engineering with Online Review Mining for Hotel Service Development
 - Yu-Hsiang Hsiao, Mu-Chen Chen and Ming-Ke Lin
- Evaluation of Destination Characteristics and Public Relation Activities by Convention Bureaus
 - Hidekazu Iwamoto, Tokuro Matsuo, Toshikazu Fukushima and Norihisa Komoda
- Analysis of a time lag of patents application and product shipment
 - Jun Hosoya

CSII-WS2-1

Room D

Session Chair: Yoshinori Watanuki (Toyo university)

- A study of the Relationships between the Personality Inventory, the Projection Method, and Performance Testing
 - Chieko Kato, Toru Sugahara, Koichiro Aoki, Hideo Shibutani
- Accessing the "Other Side" through Technology The Case of Ōe Kenzaburō's Torikaeko
 - Kensei Tsuchida
- Impact of synchronous expression of smiling on interpersonal behavior and appeal evaluation
 - Keisuke Ando, Waka Ibaragi, Toru Sugahara, Masami Miyazaki

- Study on Category Classification of Conversation Document in Psychological Counseling with Machine Learning
 - Yasuo Ebara
- Measurement of Focus on Drawings by Eye-tracker Comparison between Experts and Non-experts
 - Hideo Shibutani, Koichiro Aoki, Fumiko Goto, Chieko Kato

BCD-3

Room E

Session Chair: Olumuyiwa Ibidunmoye (Umea University, Sweden)

- Supervised-Topic-Model-based Hybrid Filtering for Recommender Systems
 - Mimu Kawai, Takayuki Shiohama and Hiroyuki Sato
- An Empirical Study on Relationships between Comments and Design Properties
 - Yuto Miyake, Sousuke Amasaki, Hirohisa Aman and Tomoyuki Yokogawa
- An Identification Method of IR Signals to Collect Control Logs of Home Appliances
 - Yuta Takahashi and Teruhiro Mizumoto
- MULTI-NODE BIG DATA VM PLATFORM AND JOB SUBMISSION PORTLET
 - Chien-Heng Wu, Wen-Yi Chang, Whey-Fone Tsai, Franco Lin, Ching-Fang Lee and Chao-Tung Yang
- Global and Local Bursts Detection in Streaming Data
 - Phyu Phyu Khaing

ESKM-4

Room F

Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- Word Cloud of Online Hotel Reviews in Myanmar for Customer Satisfaction Analysis
 - Vimolboon Cherpanukorn and Phasit Charoenkwan
- Adaptable Web Presentation System with Layered Canvas Synchronization Mechanism for Scalability
 - Eishun Ito, Tadachika Ozono and Toramatsu Shintani
- The adaptation of a post-acceptance model for information system continuance in recommender systems
 - Wen-Yau Liang

11:00AM-12:00PM

Keynote 1

Room A (Auditorium)

Session Chair: Yuichi Ono (University of Tsukuba, Japan)

- A Computational Approach to Chinese Characters
 - Antoine Bossard, Ph.D. (Department of Computer Science, Kanagawa University, Japan)

CSII-WS2-2

Room D

Session Chair: Chieko Kato (Toyo University)

- A study of incident mechanisms in flow trials
 - Takuya Ozaki, Chieko Kato, Yoshiomi Otsuka
- Sports Reporting in the Osaka-Mainichi Shinbun at the Turn of the Twentieth Century
 - Yoshinori Watanuki, Koichiro Aoki
- On the Use of Famous Phrases for the Enhancement of an Athlete's Attitude and Mental Conditioning
 - Yasutaka Okamoto, Toru Sugahara, Yoshinori Watanuki, Chieko Kato

BCD-SS3

Room E

11:00AM-12:00AM

Session Chair: Izuru Kume (Nara Institute of Science and Technology)

- Is Cutting-Edge Software Engineering Attractive for Developers in Small and Medium-Sized Enterprises?
 - Yukasa Murakami, Masateru Tsunoda
- Analyzing execution traces of failed programs for materializing chain of infection
 - Izuru Kume, Masahide Nakamura, Naoya Nitta, Etsuya Shibayama

ACIT-SS1**Room F**

Session Chair: Motoi Iwashita (Chiba Institute of Technology, Japan)

- A Concept Proposal on Modeling of Security Fatigue Level
 - Shigeaki Tanimoto, Keita Nagai, Kenichiro Hata, Takashi Hatashima, Yasuhisa Sakamoto, Atsushi Kanai
- Enhancing Network Connectivity Supporting Next Generation Smart Society
 - Yoshiko Sueda, Arata Koike
- A Key Factor of ICT-Related New Service Design
 - Motoi Iwashita

1:00PM-2:00PM**Keynote 2****Room A (Auditorium)**

Session Chair: Naoki Fukuta (Shizuoka University, Japan)

- Building Smart Buildings using the Service-Oriented Things Framework in the WuKong IoT Middleware
 - Kwei-Jay Lin, Ph.D. (University of California, Irvine)

CSII-WS2-3**Room D**

Session Chair: Kensei Tsuchida (Toyo university)

Evaluation of Differences in Influence of Spontaneous Laughter and Forced Laughter on Autonomic Nerves

Ryuma Onose, Toru Sugahara, Yoshiomi Otsuka, Chieko Kato, Masami Miyazaki

The relationship between athletes' personality and Baum test

Natsumi Yamagata, Yoshinori Watanuki

Depth Recognition in 3D Translucent Stereoscopic Imaging of Medical Volumes by means of a Glasses-Free 3D Display

Yurina Kitaura, Kyoko Hasegawa, Yuichi Sakano, Roberto Lopez-Gulliver, Liang Li, Hiroshi Ando, Satoshi Tanaka

ACIT-3**Room E**

Session Chair: Muhammad Hamid Ch (University of the Punjab, Lahore)

- Spatio-Temporal Change Detection in Urban Land Use and Land Surface Temperature By Using Landsat Imageries
 - Muhammad Hamid Ch, Faiza Mahmood, Qudsia Gulza, Nida Samad, Burhan Khalid
- Surface Geological Pattern Recognition through Satellite Image Processing: A Case Study of Central Salt Range
 - Muhammad Hamid Ch, Muzammil Abbas, Qudsia Gulzar, Nida Samad, Muhammad Burhan Khalid
- A Fast Area Labeling Method using Auxiliary Lines
 - Noboru Abe, Kohei Kuroda, Yosuke Kamata, Shogo Midoritani

ACIT-2**Room F**

Session Chair: Ju-Yeon Jo (University of Nevada Las Vegas, USA)

- Binary Blockchain: Solving the Mining Congestion Problem by Dynamically Adjusting the Mining Capacity
 - Yoohwan Kim, Juyeon Jo
- Spatio-temporal Validation of AIRS CO₂ Observations using HIPPO, TCCON and GEOS
 - Hui Yang, Hao Yang, Yunjing Xu, Gefei Feng, Yong Qin, Songnian Li
- Computing Skyline using Taxicab Geometry
 - Partha Ghosh, Takaaki Goto, Soumya Sen

2:00PM-3:30PM

IIAI AAI 2017 Poster Session

Foyer

Session Co-chair: Masao Mori (Tokyo Institute of Technology, Japan), Naoki Fukuta (Shizuoka University, Japan)

- Zone A (AI & Smart Computing)
 - Proposal and Evaluation of prediction of pavement rutting depth by recurrent neural network
 - Tomoyuki Okuda, Kouyu Suzuki and Naohiko Kohtake
 - A Dynamic Programming Method for A Reverse Auction Model in Service Choice Markets
 - Keita Tsuji and Satoshi Takahashi
 - A Practical Study on Feature Selection Methods in Pattern Recognition. Examples of Handwritten Digits and Printed Musical Notation
 - Wladyslaw Homenda and Agnieszka Jastrzebska
 - Recovery of Lost Color Information Using Neural Network
 - Shun Ogiue and Hiroshi Ito
 - Using Machine Learning to Assist Crime Prevention
 - Ying-Lung Lin, Tenge-Yang Chen and Liang-Chih Yu
 - From Eye Fixation to Perception
 - Kangwoo Lee and Hyunseung Choo
 - Report on Behavior Analysis Using Text Mining in Pair Programming Education
 - Maho Ueda, Yuri Suzuki, Akitoshi Itai, Takayoshi Yamashita and Norio Ishii
- Zone B (Service and Knowledge Management)
 - Generating Wikipedia-Like Biographical Sentences from Web People Search Results
 - Harumi Murakami, Toshimune Konishi and Yoshinobu Ura
 - Stochastic Speculative Computation Method on GPGPU
 - Yousuke Suzuki and Yasuki Iizuka
 - Foreign Patterns Rejection using Clustering and Classification
 - Wladyslaw Homenda and Agnieszka Jastrzebska
 - Proposal of Online Outlier Detection in Sensor Data Using Kernel Density Estimation
 - Md Atiqul Haque and Hiroshi Mineno
 - Design of Data Management System for Evaluating Driving Performance of rescue robot
 - Dong-Yeong Gu, Young-Duk Kim, Seong-Ho Jeong, Guk-Jin Son and Sang-Eun Seo
 - Improving Document Availability in Storage
 - Hiroki Tanioka, Takafumi Bando, Kenji Matsuura, Kenji Ohira, Masahiko Sano and Tetsushi Ueta
 - Visualization Method of Web Pages based on Syllabus
 - Yoshitomo Yaginuma
 - Adaptive recommendation of teaching materials based on free descriptions in MOOC course
 - Masako Furukawa and Kazutsuna Yamaji
- Zone C (Learning and Education Technologies)
 - SOCIALClassnet as an LMS for Online Flipped Learning Environment
 - Issara Kanjug, Chirawat Na-Ngam, Parnpitcha Kanjug and Suchat Wattanachai
 - Proposal of a PAD Evaluation Standard for Programming Education
 - Naoki Oyake, Yuri Suzuki and Norio Ishii
 - Paper Romance-An educational simulation game for learning papermaking with contextual scaffoldings for elementary students: The evaluation of learning performance and flow state
 - Fu-Jung Lin, Chai-Ping Wang, Hui-Ci Zhung, Hsin-Yi Wang, Shu-Ming Wang, Cheng-Tai Li, Ming-Chaun Li and Huei-Tse Hou
 - Analysis of Effects of Cooperative Learning Due to Differences in Students' Skills
 - Masaya Uchi, Yuri Suzuki, Akitoshi Itai, Takayoshi Yamashita and Norio Ishii
 - Cultivating Students' Good Habit for Writing in a Portfolio Management Game
 - Chang-Yen Liao and Wan-Chen Chang
 - The Development and Evaluation of an Educational Game Integrated with Augmented Reality and

- Virtual Laboratory for Chemistry Experiment Learning
 - Huei-Tse Hou and Ying-Chen Lin
 - Improving Children's Textual Cohesion based on Game-Based Writing Environment
 - Wan-Chen Chang and Chang-Yen Liao
 - Design and Development of Constructivist Multimedia Learning Environment Enhancing Skills in Computer Programming
 - Charuni Samat, Sumalee Chaijaroen, Issara Kanjug and Pornsawan Vongtathum
 - Design Framework fo Constructivist Augmented Reality Web-based Learning Environments to Enhance Creative Thinking on Topic Design and Create Three-Dimensional for Secondary School
 - Phummiphat Klomwiphawat and Charuni Samat
 - Synthesis of Designing framework for Constructivist Learning Environments Model to enhancing Well-structured Problem Solving in Computer Programming
 - Nutthakarn Moeikao, Charuni Samat
 - Designing Framework of Constructivist Flipped Classroom Environment Learning for Enhance Problem Solving and Decision Making for Programming Computer with Scratch
 - Pattama Khohanam and Charuni Samat
- Zone D (Business and Industrial Informatics)
 - On Big Data-based Fraud Detection Method for Financial Statements of Business Groups
 - Yuh-Jen Chen and Chun-Han Wu
 - Character Recognition in Road Signs using a Smartphone
 - Ryo Moriwake, Stephen Karungaru and Kenji Terada
 - The Effect of Positive and Negative Switching Barriers on Switching Intention in Mobile Phone Services
 - Yi-Fei Chuang and Chorng-Jian Liu
 - A Musical Composition Assistant System using a Stochastic Musical Model
 - Yumi Isowa, Nami Iino, Shigeki Okino and Yasuki Iizuka
 - A Novel Method of Spatial Calibration for Camera and 2D Radar Based on Registration
 - Chanho Song, Gukjin Son, Heekang Kim, Dongyeong Gu, Jinhee Lee and Youngduk Kim
 - Map Reconstruction for Driving Scenarios Using Monocular Camera
 - Yu-Ting Chen, Tien-Pei Lin, Feng-Li Lian
 - IoT sensor based Mobility Performance Test-bed for Disaster Response Robots
 - Youngduk Kim, Seongho Jung, Dongyoung Gu, Heekang Kim and Chanho Song

3:30PM-5:40PM

LTLE-SS2

Room B

Session Chair: Wang Jingyun (Kyushu University, Japan)

- Investigations of the Effect of Format of Advance Organizers on Learners' Achievement on Understanding of Science Concepts
 - Han-Chin Liu and Hsueh-Hua Chuang
- A visualization tool to support analyzing and evaluating Scratch projects
 - Chih-Kai Chang, Yu-Tzu Tsai and Ya-Lun Chin
- Semi-automatic construction of ontology based on data mining technique
 - Wang Jingyun, Flanagan Brendan and Hiroaki Ogata
- Building a Visualized Learning Tool to Facilitate the Concept Learning of Object-Oriented Programming
 - Jun-Ming Su and Feng-Yuan Xu
- From Cards To Digital Games: Closing the loop
 - Andrea Valente and Emanuela Marchetti

BMOT-2

Room C

Session Chair: Juite Wang (National Chung Hsing University, Taiwan)

- Technological Opportunity Analysis for the Telehealth Industry

- Juite Wang and Yi-Jing Chen
- The Association of Product Metaphors with Emotionally Durable Design
 - Chih-Hsiang Ko
- Proposal of Framework for Concept Design in a Team: Results of Application to 43 Teams
 - Takashi Hatta, Nobuyuki Kobayashi, Aki Nakamoto, Ayumi Kojima and Hidekazu Nishimura
- Verification of Business Processes with Time Constraints
 - Ryoya Shiraki and Yoshiyuki Shinkawa

CSII-WS2-4

Room D

Session Chair: Hideo Shibutani (Toyo university)

- A study on the psychological characteristics of college student athlete
 - Naoya Sekine, Koichiro Aoki, Chieko Kato
- Footprint of Emotions that Remain in Facial Features ~The influence of emotion and facial expression is given to the complexion~
 - Masami Miyazaki, Toru Sugahara, Nanako Orihara, Shinji Umezawa
- Factors of conversation satisfaction and its relevance
 - Tomohiro Yamashita, Chieko Kato, Toru Sugahara, Koichiro Aoki

ACIT-4

Room E

Session Chair: Omkar Joshi (Sharad Institute of Technology College of Engineering, India)

- GIS-Based Assessment of Ground Water Drinking Quality
 - Noman Ahmad, Amna Arzoo, Muhammad Hamid Ch, Qudsia Hamid, Nida Samad, Muhammad Imran, Umme Roman Khan, Usman Awan
- Spatial Approach for Land Fill Site Suitability Analysis (A case study of Lahore as an urban center)
 - Naima Saif, Nawal Gul Bahar, Nida Samad, Qudsia Gulzar, Filza Nadeem, Muhammad Zahid Younas, Muhammad Hamid Ch
- Part Whole Relation Extraction from Wikipedia Textual contents by applying Domain Adoption Technique
 - Omkar Joshi, Vinay Prabhavalkar

SCAI-SS1

Room F

Session Chair: Naoki Fukuta (Shizuoka University, Japan)

- Improvisation Ensemble Support Systems for Music Beginners based on Body Motion Tracking
 - Shugo Ichinose, Souta Mizuno, Shun Shiramatsu and Tetsuro Kitahara
- Competence Estimation: Classifying Expertise of Web Discussion Participants
 - Gaku Morio and Katsuhide Fujita
- An Any Application Window Sharing Mechanism Based on WebRTC.
 - Satoru Iwata, Tadachika Ozono and Toramatsu Shintani
- Construction of Linked Urban Problem Data with Causal Relations using Crowdsourcing
 - Shusaku Egami, Takahiro Kawamura, Kouji Kozaki and Akihiko Ohsuga
- Toward Empathic Agents for Defusing Toxic Behaviors on Team Competition Games
 - Kanji Watanabe and Naoki Fukuta

July 12 (Wed), 2017

8:30AM-10:40AM

LTLE-6

Room A (Auditorium)

Session Chair: Blendan Flanagan (Kyoto University, Japan)

- Applying Item Response Theory to Analyzing and Improving the Item Quality of an Online Chinese Reading

Assessment

- Xiuyun Tian, Xiaoxue Han, Hercy N.H. Cheng, Wang-Chen Chang and Calvin C.Y. Liao
- Detecting Learners' Weak Points Utilizing a Digital Pen
 - Kazuya Kishi and Motoki Miura
- Taxonomy for design and development of learning environments to enhance Digital Literacy in higher education
 - Anucha Somabut and Sumalee Chaijaroen
- Develop BW cognitive diagnostic models and program to assess students' learning statuses
 - Tsai-Wei Huang and Chih-Ming Lu

ESKM-SS3

Room B

Session Co-chairs: Hidehiko Hayashi (Hokusei Gakuen University, Japan), Akinori Minazuki (Kushiro Public University of Economics, Japan)

- A Study on Education of Exploration and Exploitation Based on Analysis of Global Intellectual Property Strategy
 - Yawen Huang, Akinori Minazuki and Hidehiko Hayashi
- The Analysis of Training Effects with Virtual Reality in Simple Task
 - Akinori Kanazawa and Hidehiko Hayashi
- A Topic Extraction Method on the flow of conversation for a Meeting
 - Takafumi Nakanishi, Ryotaro Okada, Yuichi Tanaka, Yutaka Ogasawara and Kazuhiro Ohashi
- Development and practices of civil activities support systems by information visualization technology for diffusion of social innovation
 - Rinka Kashimura, Toshiko Asai, Emi Higashi, Yukiko Minazuki, Akinori Minazuki and Hidehiko Hayashi
- Development of blood donation activity support system on service design thinking
 - Hayate Takanagane, Toshiko Asai, Kazuki Yamamoto, Yuta Watanabe and Hidehiko Hayashi

BMOT-3

Room C

Session Chair: Cheng-Han Wu (National Yunlin University of Science and Technology, Japan)

- Text-mining Application on CSR Report Analytics: A Study of Petrochemical Industry
 - Sheng-Hung Liu, Sih-Yu Chen and Sheng-Tun Li
- Pricing strategies and decisions in a Bertrand competition with Markov process
 - Cheng-Han Wu
- Competitive Advantages through CSV
 - Keiko Nishioka, Kiminori Gemba, Keisuke Uenishi and Atsuko Kaga

CSII-1

Room D

Session Chair: Arwa Alsalamah (Northeastern University)

- The Research and Design of the Proxy for Certificate Validation Based on Distributed Cross-Certification
 - Yan Liu, Zhe Yang, Yan Qin Zhu
- Accurate reliability estimation based on the collection of first-order subsystems in the bubblesort network
 - Tzu-Liang Kung, Chun-Nan Hung
- Robot to stimulate 3D movements on MEMS Magnetic Integrated Circuits
 - Surulivel Prasath Subburaj
- Intrusion Detection System Based on Gaussian Mixture Model Using Hadoop Framework
 - Wang Zhijian, Zhu Yanqin

ACIT-5&BCD-4

Room E

Session Chair: Teruhiro Mizumoto (Nara Institute of Science and Technology, Japan)

- mCITYPASS: Privacy-preserving Secure Access to Federated Touristic Services with Mobile Devices
 - Magdalena Payeras-Capellà, Macia Mut Puigserver, Jordi Castella-Roca, Llorenç Huguet
- An Efficient Signature Scheme for Anonymous Credentials
 - Chien-Nan Wu, Chun-I Fan, Jheng-Jia Huang, Yi-Fan Tseng, Hiroaki Kikuchi
- A Weight-Based Data Pre-processing Mechanism for Improving the Accuracy of the Massive Traffic Flow

Prediction

- Hong-Yi Chang, Yu-Fong Wu, Tu-Liang Lin, Wan-Kun Chang and Shih-Che Hsu
- A Rapid Incremental Frequent Pattern Mining Algorithm for Uncertain Data
 - sTu-Liang Lin, Bo-Wei Wen, Hong-Yi Chang, Wan-Kun Chang and Shih-Che Hsu

DSIR-SS5

Room F

Session Chair: Shintaro Tajiri (Yokohama College of Commerce, Japan)

- An Anaysis of Characteristics of Student-Athletes from Questionnaire by SVM
 - Toru Sugihara, Soichiro Aihara, Sachio Hirokawa and Takashi Nara
- Women's University and institutional research
 - Tetsuya Shiroishi
- Modeling dropout behavior patterns using Bayesian Networks in Small-Scale Private University.
 - Naruiko Shiratori
- On Practical Institutional Research for Small-Scale Art College a Case Study of Takarazuka University of Art and Design Tokyo School of Media Art
 - Yushi Tajima
- A data-driven approach to dropout prevention: Kyoto Koka Women's University case
 - Tomoya Hashimoto

DSIR-SS2

Room G

Session Chair: Miho Funamori (National Institute of Informatics, Japan)

- Open Science and the Academy--A Theoretical Discussion
 - Miho Funamori
- Encouraging Citizen Motivation of Crowd Science: A Case Study of Kyoto Open Science Activities
 - Eiri Ono, Yuko Ikkatai and Teruaki Enoto
- Development and Deployment of Research Data Preservation Policy at 2016's Japanese Research University
 - Takaaki Aoki, Shoji Kajita, Hirokazu Akasaka and Hagane Takeda
- The open search.org in open science era-A communication platform demo for everyone building their repositories and using others
 - Liping Ku and Qingwen Bao
- Nationwide Research Data Management Service of Japan in the Open Science Era
 - Yusuke Komiyama and Kazutsuna Yamaji

11:00AM-12:00PM

Keynote 3

Room A (Auditorium)

Session Chair: Satoshi Takahashi (The University of Electro-Communications, Japan)

- Performance Impact of Data Locality in MapReduce on Hadoop
 - Juyeon Jo, Ph.D. (Department of Computer Science, University of Nevada Las Vegas, USA)

1:00PM-2:40PM

LTLE-7

Room A (Auditorium)

Session Chair: Yuichi Ono (University of Tsukuba, Japan)

- Application of Ensemble Algorithm in Students' Performance Prediction
 - Meimei Han, Mingwen Tong, Mengyuan Chen, Jiamin Liu and Chunmiao Liu
- Development of a Workpiece Evaluation Support Mechanism for Students
 - Ryota Fukutani, Shota Itagaki, Hideyuki Takahashi, Akinobu Ando and Tetsuo Kinoshita
- Recommendation of learning path using an improved ACO based on novel coordinate system
 - Mengyuan Chen, Mingwen Tong, Meimei Han and Ying Xia
- Motivating Pre-Service Teachers with Augmented Reality to Developing Instructional Material through

Project-Based Learning Approach

- Sasithorn Chookaew, Suppachai Howimanporn, Warin Sootkaneung and Charoenchai Wongwatkit

ESKM-5

Room B

Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- An Online Recommendation Approach based on the Dynamic Adjustment of Recommendation Lists
 - Duen-Ren Liu, Kuan-Yu Chen, Yun-Cheng Chou and Jia-Huei Lee
- A social recommendation mechanism for enhancing O2O e-commerce
 - Lien-Fa Lin and Yung-Ming Li
- The State of Knowledge Extraction from Text for Thai Language
 - Ponrudee Netisopakul and Gerhard Wohlgenannt
- A Domain-Specific Web Document Re-Ranking Algorithm
 - Grace Zhao and Xiaowen Zhang

DSIR-2

Room C

Session Chair: Jonathan Aliponga (Kansai University of International Studies, Japan)

- Detection of Bibliographic Coupling Communities Using Research Output (2004-2013) From Nepal
 - Pitambar Gautam
- Evaluation and Improvement of Yamaguchi University Self-Assessment and Evaluation System
 - Kahori Ogashiwa, Takahiro Matsumoto, Yue Wang, Joji Kariya and Hiroo Naitoh
- Who is the Last Author of Your Paper?
 - Kumiko Kanekawa, Tetsuya Nakatoh, Takahiko Suzuki and Sachio Hirokawa

CSII-2

Room D

Session Chair: Surulivel Prasath Subburaj (ams Semiconductor India Pvt Ltd)

- The arcs fault-tolerance for 4-pancyclic properties of unidirectional hypercubes
 - Chun-Nan Hung, Tzu-Liang Kung, Lih-Hsing Hsu, Kevin Chen and Shi Zhe Lai
- Security Risk Management in Online Banking
 - Arwa Alsalamah
- Implementation of Document Production Support System with Obsession Mechanism
 - Ziran Fan, Takayuki Fujimoto
- A Novel Hybrid Computational Intelligence Approach for Solving General Constrained Global Optimization Problems
 - Jui-Yu Wu

ACIT-6

Room E

Session Chair: Khan Md. Anwarus Salam (IBM Research - Tokyo, Japan)

- Decision Tree Analysis in Game Informatics
 - Masato Konish, Seiya Okubo, Mitsuo Wakatsuki, Tetsuro Nishino
- Toward A Statistical Analysis of Computer Daihinmin
 - Seiya Okubo, Yuuta Kado, Yamato Takeuchi, Mitsuo Wakatsuki, Tetsuro Nishino
- Knowledge Engine for Robots Using Ontology
 - Khan Md. Anwarus Salam, Asim Munawar

LTLE-SS1&3-1

Room F

Session Chair: Chengjiu Yin (Kobe University, Japan)

- Utilizing Programming Education Support Tool pgtracer in an Actual Programming Course
 - Tetsuro Kakeshita and Miyuki Murata
- Understanding Level Analysis of Students using Programming Education Support Tool pgtracer
 - Miyuki Murata and Tetsuro Kakeshita
- Examining the Trend of Taiwan Primary and High School Scientific Exhibition by using Text Mining Technique
 - Shao-Yu Wang, Hsin-Tse Lu, Wen-Long Lee, Wan-Sheng Su, Ming-Chao Lin and Stephen J.H. Yang

- Rediscovery of Initial Habituation Importance Learned from Analytics of Learning Check Testing in Mathematics for Undergraduate Students
 - Hideo Hirose, Masanori Takatou, Yusuke Yamauchi, Fujio Kubo, Tetsuji Taniguchi, Mitsunori Imaoka and Tetsuya Koyama

EAIS-3

Room G

Session Chair: Motoi Iwashita (Chiba Institute of Technology, Japan)

- A Consideration of System Architecture for Tour Planning Support
 - Yutaka Shirai and Motoi Iwashita
- Quality of Service Assurance for Internet of Things Time-Critical Cloud Applications
 - Vlado Stankovski and Salman Taherizadeh
- Development and Evaluation of Large-Screen Digital Kanban with Smartphone Operation
 - Shun Nakazawa, Kazuki Komatsu, Tetsuo Tanaka and Kazunori Matsumoto
- A case study of ArchiMate® for the African Healthcare Information System
 - Mariam Traoré and Shuichiro Yamamoto

3:00PM-4:40PM

LTLE-8

Room A (Auditorium)

Session Chair: Yoshinori Miyazaki (Shizuoka University, Japan)

- Integrating clustering and sequential analysis to explore students' behaviors in an online Chinese reading assessment system
 - Liansheng Jia, Hercy N.H Cheng, Sannyuya Liu, Wang-Chen Chang, Yangjun Chen and Jianwen Sun
- Evaluating Children's Composition based on Chinese Linguistic Features with Machine Learning
 - Yangjun Chen, Calvin C.Y Liao, Sannyuya Liu, Hercy N.H Cheng, Liansheng Jia and Jianwen Sun
- Building Personalized Readability Equation And Personalized English Vocabulary List for Continued Study
 - Huynh Nguyen Tra My, Shumma Suzuki and Yoshinori Miyazaki

SCAI-5

Room B

Session Chair: Naoki Fukuta (Shizuoka University, Japan)

- Identifying expectation transformation in a housing market under different exogenous conditions: an agent-based modeling approach
 - Xu Ruhang
- A Study of New Algorithm for Detecting Optimal Composition of Protein Discontinuous Fragments Alignment
 - Chi-Hua Tung and Tzu-Wei Yen
- Mathematical model and solution for land-use crop planning with cooperative work
 - Senlin Guan, Takeshi Shikanai, Morikazu Nakamura and Koichiro Fukami
- A three-agent flow shop problem for minimizing the total completion time
 - Wen-Chiung Lee and Jen-Ya Wang

DSIR-3

Room C

Session Chair: Michiyo SHIMAMURA (Japan Agency for Marine-Earth Science and Technology, Japan)

- Demand Survey of STEM Classes as Liberal Arts Subjects
 - Yoshihiko Shoji
- Is it necessary to measure Japanese students' social skills?
 - Jonathan Aliponga
- Data Consideration for At-risk Students Early Alert
 - Nai-Lung Tsao, Chin-Hwa Kuo, Ting-Lun Guo and Tzu-Jui Sun

CSII-3

Room D

Session Chair: Jui-Yu Wu (Lunghwa University of Science and Technology)

- A Particle Swarm Optimization based Energy Management Strategy for Hybrid Generation System
 - Yu-Shan Cheng, Yi-Hua Liu, Shun-Chung Wan
- Microblog Label Recommendation Based on Matrix Decomposition Model
 - Gao Zeyang
- An Intelligent Noninvasive Taste Detection App for Watermelons
 - Yu-Shan Cheng, Shun-Chung Wang, Yi-Hua Liu and Bo-Ruei Peng

ACIT-SS2

Room E

Session Chair: Yuhki Kitazono (National Institute of Technology, Kitakyushu College, Japan)

- Meal-assistance Robot Operated by Head Movement
 - Hiromasa Tomimoto, Shingo Aramaki, Shota Nakashima, Shenling Mu, Kazuo Haruyama, Kanya Tanaka
- Heart Rate and Heart Rate Variability Measuring System by Using Smartphone
 - Muhammad Khairul Nizar Bin Khairuddin, Kazuhiro Nakamoto, Shota Nakashima, Hiroshi Nakamura, Kanya Tanaka
- Voice Recognition and Information Transmission System for Hearing Impaired People
 - Kosuke Ando, Seiichi Serikawa, Yuhki Kitazono
- Development of the Programmable Suspension
 - Hiroki Hanamori, Keiichi Yoshino
- Development of Hand-held Digital Effector using Touch Sensor
 - Kouki Minamoto, Keiichi Yoshino

LTLE-SS1&3-2

Room F

Session Chair: Chengjiu Yin (Kobe University, Japan)

- E-book-based Learning Analytics for Improving Learning Materials
 - Kousuke Mouri and Chengjiu Yin
- A Multi-model SVR Approach to Estimating the CEFR Proficiency Level of Grammar Item Features
 - Brendan Flanagan, Sachio Hirokawa and Hiroaki Ogata

SISS-2

Room G

Session Chair: Satoshi Takahashi (The University of Electro-Communications, Japan)

- Symbiotic Autonomous Decentralized System on Cooperative Distributed Scheduling
 - Tomoichi Ebata, Tatsuhiko Sato, Yoshiyasu Takahashi, Yumiko Ishido and Minoru Koizumi
- Incorporating Social Network Text Mining with Lifestyle Segmentation Analysis
 - Nitipan Ratanasawadwat and Rachsuda Jiamthaphaksin
- Decision Support Model and Software for Consolidated Order Assignment to Delivery Trucks
 - Chartchai Leenawong

July 13 (Thu), 2017

Forum Discussion (Invitation Only)

Closed

Session Chair: Naoki Fukuta (Shizuoka University, Japan)