ESKM-1  Room B
Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- Online Recommendation based on Collaborative Topic Modeling and Item Diversity
  - Duen-Ren Liu, Yun-Cheng Chou and Ciao-Ting Jian
- Creating Character Networks from Comics using Frames and Words in Balloons
  - Harumi Murakami, Yusuke Nagaoka and Ryota Kyogoku
- An IoT System with Remote Re-configurable Wireless Sensor Network Nodes and Its Application to Measure Activity of a Class
  - Takashi Yamanoue, Daichi Yokoyama, Ryoya Umeda, Shota Morita, Takashi Ozeki and Noboru Nakamichi

SCAI-1  Room C
Session Chair: Katsuhide Fujita (Tokyo University of Agriculture and Technology, Japan)

- Minimizing the Total Weighted Completion Time for Three Cooperating Agents
  - Wen-Chiung Lee and Jen-Yu Wang
- Stamp Rally Application Development for Building an Information Collecting Platform to Promote the Use of Local Resources
  - Hirotsugu Minowa and Ryo Samemoto
- Fast identification of topic burst patterns based on temporal clustering
  - Zhuoyang Xu and Mizuho Iwaihara
- Prediction of Pressure Flexure Impact Strength on the Mixing of Pozzolan Cemant with Fuzzy Logic
  - Suppachai Howimanporn, Warin Sootkaneung, Chakkaphan Sangsuwan and Singkaew Pokterng
- ThaiFBDeep: A Sentimental Analysis using Deep Learning combined with Bag-of-Words features on Thai Facebook Data
  - Phasit Charoenkwan

LTLE-1  Room D
Session Chair: Hideo Hirose (Hiroshima Institute of Technology, Japan)

- How Students Understand the Visual Grade Report
  - Yoshihiko Shoji and Yoshihiro Kokubo
- Success/Failure Prediction for Final Examination using the Trend of Weekly Online Testing
  - Hideo Hirose
- Attendance to Lectures is Crucial in Order Not to Drop Out
  - Hideo Hirose
- Traceability Editing and Checking Functions for Requirement Management Education Support Tool REMEST
  - Naoki Maeda and Tetsuro Kakeshita
- English Writing Support for Japanese EFL Visually-Impaired Learners: A Preliminary Study
  - Shiori Sunakawa and Yuichi Ono

SCAI-SS1-1  Room E
Session Chair: Naoki Fukuta (Shizuoka University, Japan)

- Towards Handling Spatio-Temporal Contexts on Linked Open Data for Points of Interest
  - Nurul Firdaus, Takuya Adachi and Naoki Fukuta
- A QS-Learning-based Patrol Behavior Learning for Avoiding Illegal Disposals
  - Keita Sugiyama and Naoki Fukuta
- Action Strategy in Sevens
  - Ryoto Ishikawa and Katsuhide Fujita
LTLE-SS1-1
Session Chair: Noriko Uosaki (Osaka University, Japan)
- A Pairing Method Based on Characteristics of Learners’ Artifacts in Conceptual Modeling Exercises
  ➢ Daisuke Ike, Tanaka Takafumi, Kousuke Mouri and Keiichi Kaneko
- Practicing the Scholarship of Teaching and Learning with Classroom Learning Analytics
  ➢ Mehrsa Alizadeh
- A Learning Analytics Platform Approach to Seamless Learning
  ➢ Brendan Flanagan and Hiroaki Ogata
- Seamless Support for International Students’ Job Hunting in Japan Using Learning Log System and eBook
  ➢ Noriko Uosaki, Kousuke Mouri, Chengjiu Yin and Hiroaki Ogata
- Automated Evaluation of Students Comments regarding Right Concepts and Misconceptions of Convex Lenses
  ➢ Masaru Taga, Toshihiro Onishi and Sachio Hirokawa

LTLE-SS1-2
Session Chair: Noriko Uosaki (Osaka University, Japan)
- Analysis of Student Activity and Its Effect Utilizing Programming Education Support Tool pgtracer
  ➢ Miyuki Murata, Naoko Kato and Tetsuro Kakeshita
- Design and Development of a Subtitle Summarization System for Vocabulary Learning
  ➢ Kawashima Hiroharu, Tanaka Takafumi, Kousuke Mouri and Keiichi Kaneko

July 9 (Mon), 2018

ESKM-2
Session Chair: Sachio Hirokawa (Kyushu University, Japan)
- Comment generation system for program procedure learning
  ➢ Akiyoshi Takahashi, Hiromitsu Shina, Ryunosuke Ito and Nobuyuki Kobayashi
- Finding Concepts of Music Objects with Unexpected Multi-Labels Based on Shared Subspace Method
  ➢ Hongjie Zhai, Makoto Haraguchi, Yoshiaki Okubo and Heyu Liu
- Finding high quality documents through link and click graphs
  ➢ Linfeng Yu and Mizuho Iwaihara
- Selecting article segment titles based on keyphrase features and semantic relatedness
  ➢ Yuming Guo and Mizuho Iwaihara

LTLE-WS-1
Session Chair: Hui-Chun Chu (Soochow University, Taiwan)
- Using brainwave characteristics for exploring the effect of integrating Graduated-Prompting strategy into interactive e-books on students’ learning attention
  ➢ Ya-Jing Yu, Hsiu-Jou Chen and Po-Han Wu
- Effects of Cognitive Styles on Learning Performance and Gaming Behavior in a Programming Board Game
  ➢ Jung-Chuan Yen and Wei-Chi Liao
- Effect of the Interactive Concept Map Instant-Feedback Approach in a Visual Reality Learning environment in Astronomy Courses
  ➢ Yi-Chiao Hsieh, Hui-Chun Chu and Kai-Hsiang Yang
- Effects of a Two-stage Concept Mapping-based Collaborative Gaming approach on the English Learning Achievement and Behavioral Patterns of Students with Different Learning Anxiety Levels
  ➢ Lin Wang, Hui-Chun Chu and Chun-Chieh Wang

IDDC-1
Session Chair: Ziran Fan (Toyo University, Japan)
- Collaborative Messaging Protocol with Multiple Intermediate Nodes
  ➢ Hiroyoshi Ichikawa and Aki Kobayashi
A Lightweight Augmented Reality System to See-through Cars
- Bing-Jie Yuan, Yan-Ann Chen and Shao-Zhen Ye

Evaluation Framework of Digital Signage Contents
- Chenyan Zou, Nobuyuki Kobayashi and Shinji Wakiyama

Intelligent Maze Generation based on Topological Constraints
- Paul Kim and Roger Crawfis

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

Exploring factors in the success of academic crowdfunding in Japan
- Yuko Ikkatai and Eiri Ono

Requirement Analysis of a System for Research Data Management for Preventing Scientific Misconducts
- Miho Funamori, Masaharu Hayashi, Yusuke Komiyama, Masatoshi Tsuchiya and Kazutsuna Yamaji

Promoting Open Access by the Kyoto University Library
- Chifumi Nishioka

Multifaceted workshops to envision the future of open science with society
- Yasuhisa Kondo, Kazuhiro Hayashi and Asanobu Kitamoto

Session Chair: Takahiro Niwa (Aichi Institute of Technology, Japan)

Measurement of Line-of-Sight Detection Using Pixel Quantity Variation and Application for Autism
- Takahiro Niwa, Ippei Torii, Naohiro Ishii

Generation of Convex Cones Based on Nearest Neighbor Relations
- Naohiro Ishii, Ippei Torii, Kazunori Iwata, Kazuya Odagiri, Toyoshiro Nakashima

Concept of Policy Information Decision Method in the Cloud Type Virtual Policy Based Network Management Scheme for the Specific Domain
- Kazuya Odagiri, Shogo Shimizu, Makoto Takizawa, Naohiro Ishii

Session Chair: Chih-Ming Chen (National Chengchi University, Taiwan)

The Effects of Video-Annotated Listening Review Mechanism on Promoting EFL Listening Comprehension
- Yi-Chen Su, Chih-Ming Chen and I-Chun Chen

Improving Effectiveness of Learners’ Review of Video Lectures by Using an Attention-based Video Lecture Review Mechanism based on Brainwave Signals
- Cheng-Ho Lin, Chih-Ming Chen and Yong-Teng Lin

Community Detection with Opinion Leaders’ Identification for Promoting Collaborative Problem-based Learning Performance
- Yi-Meng Liu and Hui-Chun Chu
- Han-Wen Tsao, Chih-Ming Chen and Zong-Lin You

**DSIR-SS1-2**

Session Chair: Miho Funamori (National Institute of Informatics, Japan)
- Concept of a Unified Research Management System and its Application to Data Clustering
  - Hiroshi Masui, Kei Kikuchi, Ren Kurose and Xun Shao
- DOI-minting to solar-terrestrial physics data in Japan
  - Masahito Nose, Yasuhiro Murayama, Takenari Kinoshita, Yukinobu Koyama, Michi Nishioka, Mamoru Ishii, Manabu Kunitake, Koji Imai, Toshihiko Iyemori and Takashi Watanabe
- The Role of Academic Institutions in Supporting Citizen Science: A Historical Seismology Case Study
  - Yuta Hashimoto and Yasuyuki Kano

**ACIS CSII-SS2-1**

Session Chair: Ushio Inoue (Tokyo Denki University, Japan)
- Synchronizing Method of Music and Movie Clips Considering Temporal Harmony
  - Toshihiro Ozaki, Teruhisa Hochin, Hiroki Nomiya
- Development of Forest Information Management DB System Considering Ease of Use
  - Kenji Nozaki, Teruhisa Hochin, Hiroki Nomiya
- Incremental Clustering for Hierarchical Clustering
  - Kakeru Narita, Teruhisa Hochin, Hiroki Nomiya

**1:00PM-1:30PM**

**IIAI AAI 2018 Opening Ceremony**

**1:30PM-2:20PM**

**Keynote 1**

Session Chair: Kiyota Hashimoto, Prince of Songkla University, Thailand
- How we behave at an international conference: Human indoor flow detection and its integration with Big Data
  - Hidekazu Yanagimoto, Dr. Eng. (Osaka Prefecture University, Japan)

**2:20PM-3:10PM**

**Keynote 2**

Session Chair: Naoki Fukuta, Shizuoka University, Japan
- Towards future AI society
  - Hisashi Hayashi, Ph.D. (Advanced Institute of Industrial Technology, Tokyo, Japan)

**3:30PM-5:35PM**

**EAIS-1**

Session Chair: Shuichiro Yamamoto, Nagoya University, Japan
- Proposal of software quality confirmation method using feature model
  - Hiroyuki Utsunomiya and Shuichiro Yamamoto
- A Survey On Visualizing EA models
  - Shuichiro Yamamoto
- Healthcare CloudEcosystem Risk Analysis and Modeling: A FAIR Approach
  - Mariam Taore and Shuichiro Yamamoto
- Proposal of a Method to Understand and Model Dynamic Mechanisms Existing in Business Context
  - Koji Okada, Hayato Nishizono, Kosuke Tsubouchi and Tatsuya Hirukawa

**LTLE-WS-3**

Session Chair: Jie Chi Yang (National Central University, Taiwan)
- Learning Health Concepts Through Game-Play
  - Ming-Puu Chen, Yi-Husan Chen, Hao-Ling Huang and Teng-Chih Yang
- Effects of Web Issue-Quest Approaches with Different Prompting Strategies on Students’ Learning Performance
in a Natural Science Course

- Chia-Ying Tsai, Chun-Chieh Wang, Hui-Chun Chu and Zhi-Wen Chen
- Effects of Question Types on Engagement and Performance of Programming Learning for Non-Computer Science Majors
  - Nuttaphat Arunoprayocho, Chih-Hung Lai, Pham-Duc Tho, Jing-San Liang and Jie Chi Yang
- Effects of Dietary Infographics and Cognitive Styles on Learners Information Processing
  - Chia Ching Lin, Iwen Huang and Shang Hung Wu
- Understanding Teachers’ Design Thinking in Designing Game-based Activities
  - Mingfong Jan, Wan-Lin Yang

LTLE-3

Session Chair: Chih-Ming Chen (National Chengchi University, Taiwan)

- An English Vocabulary Learning APP with Self-regulated Learning Mechanism for Promoting Learning Performance and Motivation
  - Wen-Chien Chang, Chih-Ming Chen and Shun-Min Yang
- An Effective Group Incentive Mechanism in a Collaborative Problem-based Learning System for Enhancing Positive Peer Interaction and Learning Performance
  - Chih-Hung Chang, Chih-Ming Chen and Rong-Hua Zhao
- An Automatic Text Annotation System to Improve Reading Comprehension of Chinese Ancient Texts
  - Hsiao-Ting Tsai, Chih-Ming Chen and Chen-Yu Liu
- A Visual Interactive Reading System Based on Eye Tracking Technology to Improve Digital Reading Performance
  - Chih-Ming Chen, Yu-Chieh Lin and Chin-Sheng Chang
- A Collaborative Reading Annotation System with Gamification Mechanisms to Improve Reading Performance
  - Chih-Ming Chen, Ming-Chaun Li and Tze-Chun Chen

DSIR-SS2

Session Chair: Kunihiko Takamatsu (Kobe Tokiwa University, Japan)

- Generic Support System Prototype in Eduinformatics for Students Selecting a Seminar
  - Masayuki Seki, Yasuo Nakata, Yasuhiro Kozaki, Katsuhiro Murakami, Eriko Matsumoto, Kenya Bannaka, Ikuiro Noda, Kenichiro Mitsunari and Kunihiko Takamatsu
- An Approach for Estimation of Students’ Learning States using Bayesian Network with LMS Log Data
  - Nobuhiro Kondo and Toshiharu Hatanaka
- Predicting the Probability of Student Dropout through EMIR Using Data from Current and Graduate Students
  - Katsuhiko Murakami, Kunihiko Takamatsu, Yasuhiro Kozaki, Aoi Kishida, Kenya Bannaka, Ikuiro Noda, Jyunichiro Asahi, Kazutaka Takao, Kenichiro Mitsunari, Tadashi Nakamura and Yasuo Nakata
- A New Way of Visualizing Curricula Using Competencies: Cosine Similarity and t-SNE
  - Kunihiko Takamatsu, Katsuhiro Murakami, Yasuhiro Kozaki, Kenichi Miyasaka, Ikuhiro Noda, Raphael-Joel-Wei Lim, Kenichi Miyasaka, Tadashi Nakamura and Yasuo Nakata

ACIS CSII-SS2-2

Session Chair: Teruhisa Hochin (Kyoto Institute of Technology, Japan)

- Estimation Improvement of Objective Scores of Answer Statements with Consideration of Multicollinearity and Semantic Similarity
  - Yuya Yokoyama, Teruhisa Hochin, Hiroki Nomiya
- Improvement of Automatic Composition System Based on Melodic Outlines and Impression Words
  - Saori Nakamura, Teruhisa Hochin, Hiroki Nomiya
- Estimation of personal preferences on points of interest
  - Shunki Yuge, Akihiro Ogino
- Personalized Impression-based Music Information Retrieval Method
  - Yuki Yasui, Akihiro Ogino
- Personal KANSEI coordinating system for Room Interior Design
  - Yuki Yasui, Akihiro Ogino
- Information System for Estimating People's Mood at Sightseeing using Their Pulses Information
  - Yusuke Ikematsu, Akihiro Ogino
July 10 (Tue), 2018

SCAI-SS2  Room B
Session Chair: Ruey-Maw Chen and Chi-Chun Chen (National Chin Yi University of Technology, Taiwan)
● Reviews of Feedback-based Over-load Protection Algorithms
  ➢ Hsiung Lin, Kai-Chun Hsiao and Bo-Rong He
● Application of Stock Analysis Using Deep Learning
  ➢ Bo-Sheng Lin, Wei-Tao Chu and Chun-Mu Wang
● Electronic Platform for Ladder-Climbing Exercise for Stroke Rehabilitation
  ➢ Chi-Chun Chen, Chun-Cheng Lin, Hui-Chun Feng and Ching-Ping Chang
● Optimal Routing for Split Delivery Vehicle Routing Problems
  ➢ Ruey-Maw Chen and Jia-Ci Guo
● A Cyber Cloud Monitoring System Based on Image Recognition
  ➢ Shi-Xun Huang and Wen-Yuan Chen

BMOT-1  Room C
Session Chair: Hidekazu Iwamoto (Josai International University, Japan)
● Exploring International Backpackers’ Motivation in Overseas Countries from Travel Career Perspective
  ➢ Yueh-chiu Wang and Chi-Jou Chen
● Apply Data Mining Approach to Identify Non-revisit Factors for Hotel Industry
  ➢ Jing-Rong Chang, Long-Sheng Chen and Shu-Cih Tseng
● Public Resource Supply-Demand Matching on Distributed Cooperative Scheduling
  ➢ Tomoiuchi Ebata, Tatsuhiro Sato, Yoshiyasu Takahashi and Kojin Yano
● Managing a monolithic system or a System-of-Systems? An assurance case approach to reach intra-organizational consensus
  ➢ Nobuyuki Kobayashi, Aki Nakamoto, Maki Kawase, Fiona Sussan, Makoto Ioki and Seiko Shirasaka
● A Method of Conversion Wants Chain Analysis to System Dynamics for Evaluation of Business Model
  ➢ Seiji Shima, Nobuyuki Kobayashi and Seiko Shirasaka

LTLE-4 + LTLE-SS2  Room D
Session Chair: Kosuke Kaneko (Kyushu University, Japan)
● Time Duration Statistics Spent for Tackling Online Testing
  ➢ Hideo Hirose
● Identifying Optimal Group Size for Collaborative Argumentation Using SNS for Educational Purposes
  ➢ Michiko Sugai, Tatsuya Horita and Yuichi Wada
● An Open-ended Question Self-explanation Classification Methodology for a Virtual Laboratory Learning System
  ➢ Qi-Zhone Huang, Chih-Chao Hsu and Tzong-I Wang
● Reflective feedback to recall and reproduce the successful physical movement
  ➢ Kenji Matsuura
● Developing a Small-Scale Agriculture Knowledge and Information Dissemination System: Tankyu Practice Approach
  ➢ Boikobo Tlhobogang, Muhammed Wannous and Boago Setoto
A proprietary game based learning game to learn Object-Oriented Programming
  - Yoke Seng Wong, Maizatul H.M. Yatim and Wee Hoe Tan

**DSIR-SS3**

Session Chair: Michiyo Shimamura (JAMSTEC, Japan)

- Exploring the Role of Socioeconomic Status in Students Outcomes: Evidence from Taiwanese Long Panel
  - Eric Lin and Shih-Yung Chiu
- Measurement of educational effect based on behavioral change in a trans-graduate educational program
  - Shotaro Imai, Michiyo Shimamura and Kazuhiko Terasawa
- Building a learning counseling framework to encourage student growth and self-recognition
  - Kazuhiko Terasawa, Shotaro Imai and Michiyo Shimamura
- What is the most suitable "Transferable Skill Test" for the graduate school students in Research University in Japan?
  - Michiyo Shimamura, Yukinori Kobayashi and Yasuhiro Yamanaka
- Towards better problem finding and creativity in graduate school education: A Case study of Nitobe School Program
  - Ankit Ravankar, Shotaro Imai, Tomohiro Agatsuma, Abhijeet Ravankar, Teruyuki Tsuji, Tomomichi Kato, Taichi Takesaka, Kaori K Shigetomi and Ken Saito
- Construction of learning opportunity for Program Manager — Trial development of Open club of Program Manager
  - Masaaki Ichiki, Ken-Ichi Sato and Yuichi Nakagami

**ACIS BCD-1**

Session Chair: Yuki Manabe (Kumamoto University, Japan)

- BCD Conference Opening by Masateru Tsunoda (Kinki University, Japan)
- Predictability Classification for Software Effort Estimation
  - Naoki Kinoshita, Akito Monden, Masateru Tsunoda and Zeynep Yucel
- Extended Association Rule Mining with Correlation Functions
  - Hidekazu Saito, Akito Monden and Zeynep Yucel

1:15PM - 2:55PM

**ESKM-3**

Session Chair: Sachio Hirokawa (Kyushu University, Japan)

- Sentiment Classification with Gated CNN and Spatial Pyramid Pooling
  - Makoto Okada, Hidekazu Yanagimoto and Kiyota Hashimoto
- Automated User Registration Using Authentication Federation on Academic HPC System
  - Junya Nakamura and Masatoshi Tsuichiya
- Advertising Visual Attention to Facebook Social Network: Evidence from Eye Movements
  - Chun-Chia Wang, Jason C. Hung and Chun-Hong Huang
- Identification of Unnatural Subsets in Statistical Data
  - Takahiko Suzuki, Tsukasa Kamimatsu Tsukasa Kamimatsu, Tetsuya Nakatoh and Sachio Hirokawa

**BMOT-2**

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

- Quality Requirements and Satisfaction of Consumer 3D Printers
  - Chih-Hsiang Ko
- Comparison between Different Products by Disassembly System Design with Parts Selection for Cost, Recycling and CO2 Saving Rates using Multi-Criteria Optimization
  - Kento Igarasahi, Tetsuo Yamada, Norihiro Isubo and Masato Inoue
- Mathematical Modeling of Multi-player Multi-objective Decision Making by Linear Physical Programming
  - Tomoaki Yatsuka, Aya Ishigaki, Hiromasa Ijuin, Yuki Kinoshita, Tetsuo Yamada and Masato Inoue
- Shipping Plan for Apparel Products Using Shipping Record and Just-in-time Inventory at a Logistics Warehouse
  - Rina Tanaka, Aya Ishigaki, Tomomichi Suzuki, Masato Hamada and Wataru Kawai

**SCAI-3**

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

- Search for the Optimal Charging Pattern of Multi-Stage Constant Current Charging Method using Particle Swarm Optimization
Kun-Che Ho, Yi-Hua Liu and Shun-Chung Wang
- Twitter noun-verb relation thesaurus tree
- Naoki Urabe and Jun Rokui
- Implementation Swarm based Gain Scheduling Controller of 2D Inverted Pendulum using Programmable logic controller
- Suppachai Howimanporn, Sasithorn Chookaew and Warin Sootkaneung
- An Acceleration Method for Equilibrium Solution Search in Multiple OD Selfish Routing Games
- Guu Kofujita and Satoshi Takahashi
- MTSbag: A Method to Solve Class Imbalance Problems
- Yu-Hsiang Hsiao, Chao-Ton Su, Pin-Cheng Fu and Mu-Chen Chen
- Autoencoder-Based Excessive Information Generation for Improving and Interpreting Multi-Layered Neural Networks
- Ryotaro Kamimura and Haruhiko Takeuchi

DSIR-SS4-1
Session Chair: Naruhiko Shiratori (Kaetsu University, Japan)
- Do Student-Athletes Learn More in Classrooms or on the Field?
  - Shintaro Tajiri
- A Guide to Interpreting and Implementing Social Skills Data
  - Jonathan Aliponga
- Trends of Institutional Research in Japanese Medical Education: A case study of Jichi Medical University
  - Yoshikazu Asada
- An Analysis on the Relationship between Student Competencies and the Score Change Patterns of the English Skills
  - Masaaki Ishii

ACIS BCD-2
Session Chair: Akito Monden (Okayama University, Japan)
- Thai Defamatory Text Classification on Social Media
  - Ratchakrit Arreerard and Twittie Senivongse
- Identifying Spoofing Accounts on Twitter Based on Relationships of Accounts
  - Keitaro Nakasai, Masateru Tsunoda, Hideaki Hata and Kenichi Matsumoto
- Deep Learning based Sentiment Classification in Social Network Service Datasets
  - Zar Zar Wint, Yuki Manabe and Masayoshi Aritsugi

3:15PM-5:20PM

ESKM-4
Session Chair: Sachio Hirokawa (Kyushu University, Japan)
- User Behavior Analysis for Location-based Social Network
  - Jun Zeng, Xin He, Yingbo Wu and Sachio Hirokawa
- Work Study System Using Indoor Positioning Technology
  - Takami Tsuji and Sumika Arima
- Category Classification Methods Reflecting Item's Search Behaviors in Online Shopping Sites
  - Yuri Nozaki and Tetsuji Satoh
- Survey on Public Libraries Managed by Outsourcing, with a Focus on Library Usage, Opening Days, and Directors’ Qualifications
  - Yuhiro Mizunuma and Keita Tsuji

BMOT-SS1
Session Chair: Tomoko Tateyama (Hiroshima Institute of Technology, Japan)
- Control of Thermal Grid Systems by Machine Learning Techniques Incorporating Mathematical Programming
  - Yuya Morinaga, Kazutoshi Sakakibara, Takuya Matsumoto, Makoto Ohara, Ittetsu Taniguchi and Hisashi Tamaki
- Attitude Survey of Young People to Examine the Usefulness of a Skill Sharing Web Service for Regional Vulnerable Road Users
  - Shimpei Matsumoto and Nobuyuki Ohhigashi
- Development of Flat Finishing Skill Training System based on Personal Peculiarity Classification of Tool Trajectory
- Masaru Teranishi, Shimpei Matsumoto and Hidetoshi Takeno
- Effectiveness of Momentum Indicators to Improve Accuracy of Stock Price Prediction for Large-Capital Stocks
  - Yuto Otsuka and Takashi Hasuiki
- Construction of Virtual Campus Guide System using Mobile Phone
  - Asuka Kigami, Tomoko Tateyama, Shun Nishikawa, Tetsuro Katada and Shimpei Matsumoto

EAIS-SS1  Room D
Session Chair: Motoi Iwashita (Chiba Institute of Technology, Japan)
- A directional comparative analysis to find novel approaches for improving the quality of the clinical trials system
  - Tenzin Kunga, Masataka Sano and Motoi Iwashita
- Proposal of Secure Business Model by Visible Light Communication System
  - Shigeaki Tanimoto, Chise Nakamura, Motoi Iwashita, Shinsuke Matsui, Takashi Hatashima, Hitoshi Fuji, Kazuhiro Okubo, Junichi Egawa and Yohsuke Kinouchi
- Study on environmental evaluation using PRTR
  - Hiroyuki Ono
- Mobile-Carrier Choice Behavior Analysis Using Supervised Learning Models
  - Akiya Inoue, Ayako Satoh, Kenichi Kitahara and Motoi Iwashita
- On Dynamics of Handover Trajectories in LTE Cellular Network System
  - Yoshiko Sueda and Arata Koike

DSIR-SS4-2  Room E
Session Chair: Shintaro Tajiri (Yokohama College of Commerce, Japan)
- The situation of Institutional Researcher analyzed from workshop -Using Pattern Language method-
  - Toru Sugihara and Takuya Honda
- Derivation of student patterns in drop-out preliminary state and consideration for preventing dropout
  - Naruhioko Shiratori
- Research on resistance training for university students
  - Reona Ogawa, Yoshinori Watanuki and Chieko Kato
- A study on the self-affirmation of university student - Focusing on classification by personality -
  - Tatsuki Saitou, Toru Sugahara and Chieko Kato

ACIS BCD-3  Room G
Session Chair: Masateru Tsunoda (Kinki University, Japan)
- Parallelizing the Construction of a k-Dimensional Tree
  - Hiroki Yamasaki, Atsushi Nunome and Hiroaki Hirata
- Energy Informatics Applicability; Machine Learning and Deep Learning
  - Cristina Heghedus, Antorweep Chakravorty and Chunming Rong

5:30PM-7:30PM
IIAI AAI 2018 Conference Reception & Poster Session  Foyer at the Top (6th Floor)
Session Co-chair: Naoki Fukuta (Shizuoka University, Japan)
- Zone A (AI & Smart Computing)
  - Improvement of Restricted Boltzmann Machine by Sparse Representation based on Lorentz function
    - Libin Chen and Weibao Zou
  - Two Strategies for Bag-of-Visual Words Feature Extraction
    - Chih-Fong Tsai
  - Region Growing Approach on Detecting Drivable Space for Intelligent Autonomous Vehicles
    - Feng-Li Lian
  - Band Selection Method for Real-Time Fire Detection based on AUC Matrix in Hyperspectral Image
    - Heekang Kim, Chanho Song, Guk-Jin Son, Seong-Ho Jeong, Jin-Hwan Son and Young-Duk Kim
  - A Liveliness Sensing System for Solitary Aged Persons
    - Mitsugu Suzuki and Kohei Iduka
  - Method of Correction of Rotated Images using Deep Learning Networks
    - Shun Ogiue and Hiroshi Ito
- Zone B (Learning Technologies)
  - The Design and Evaluation of a Gamification Teaching Activity using Board Game and QR Code for
Organic Chemical Structure and Functional Groups Learning

- Chang-Hsin Wu, Chia-Chi Chen, Shu-Ming Wang and Huei-Tse Hou

 Investigating The Impact of Implementation Intention Strategy on Multimedia Learning Outcome: An Eye-tracking Approach

- Han-Chin Liu and Hsueh-Hua Chuang

 Redesign of a data collection in digital textbook systems

- Kousuke Mouri, Noriko Usaki, Atsushi Shimada, Chengjui Yin, Keiichi Kaneko and Hiroki Ogata

 Exploring the Effects of Multimedia Design in a Life English VR Serious Game

- Fang-Chuan Ou Yang, Hsiao-Han Chen and Ching-Jung Liao

 Developing the immersion virtual reality platform based on experiential learning cycle - using fire disaster prevention education as an example

- Sung-Chiang Lin, Hsien-Wei Wang, Tsung-Ju Lee and Hung-Chang Chan

 Brain Wave Influence on Interaction with a Communication Robot

- Masaya Nakayama, Takahito Tamai, Atsushi Ishigame and Yukie Majima

 Examination of the Efficacy of an Injection Technique Support System

- Sakiko Sumai, Kayo Haruta, Norio Ishii, Mieko Suwa, Minako Nakamura, Tomomi Morishita, Shintarou Higashiyama, Yukari Murayama, Iijima Ryota, Hiroaki Sawano and Hatsuko Suzumura

 Development of a Robot Intervention Program in Medication Instruction at a Pharmacy

- Keitaro Ishiguro, Yukie Majima, Jun Kawahara and Saki Minamino

 A Virtual Reality Learning System to Support Situational Interest in Historic Site Courses

- Kai-Yi Chin, Ya-Chuan Kao and Hsiang-Chin Hsieh

 Zone C (Service and Knowledge Management & Business and Industrial Informatics)

 A Study on the Causes of Information System Failure

- Kazuko Kobayashi

 A method to distinguish between congestion and vehicle accident using traffic radar

- Gukjin Son, Junkwang Kim, Chanho Song, Young-Duk Kim and Heekang Kim

 A Cloud Bookcase System for Mobile library

- Posheng Chiu

 Internet Based Interactive Transcription Support System for Woodblock-Printed Japanese Historical Book Images

- Chulapong Panichkriangkrai, Liang Li, Takaaki Kaneko, Ryo Akama and Kozaburo Hachimura

 A study of User Participatory Mobile App

- Wangmi Seok

 Scene Extraction of Oral Explanation for Interaction in a Pointing System

- Nobuhiko Hama, Kenta Amahaya, Keiya Sugihara, Noboru Nakamichi, Shota Morita and Watanabe Keita

 Pair-testing method to Complement User's behavior records

- Yukako Kawano, Nobuhiko Hama and Noboru Nakamichi

 Scene Extraction of Oral Explanation for Interaction in a Pointing System

- Nobuhiko Hama, Kenta Amahaya, Keiya Sugihara, Noboru Nakamichi, Shota Morita and Keita Watanabe

 Zone D (University Management and Educational Strategy)

 An AUC-based Active Learning Algorithm via LogitBoost for Binary Classification

- Zhe-Bin Zhang and Charlotte Wang

 Quality Assurance in Education through the Diploma Policy and President’s Message - An Analysis Focused on Local Community

- Kahori Ogashiwa, Toru Sugihara, Kumiko Kanekawa, Yuki Kitanaka, Kazuhisa Noguchi, Soichiro Aihara, Masao Mori and Sachio Hirokawa

 Implementation of Business Intelligence With Improved Data-Driven Decision Making Approach Case Study on Student Single Tuition Fee in State University in Indonesia

- Ardhian Agung Yulianto and Yoshiya Kasahara

 Cluster Analysis of Learners based on Video Annotations

- Masako Furukawa, Yoshitomo Yaginuma and Tsuneo Yamada

 Flipped Classrooms using Social Networks: An investigation on learning styles

- Lasith Gunawardena and Prabhani Pitigala Liyanage

 A Study of Augmented Reality in Learning, Memory and Learning Motivation: A Case Study of Practical Writing in Middle School Life
Fang-Chuan Ou Yang, Wan-Ting Huang and Ching-Jung Liao

July 11 (Wed), 2018

9:30AM-12:00PM

ESKM-SS1-1 Room B
Session Chair: Tsunenori Mine (Kyushu University, Japan)
- Evaluation of BLE Separate Channel Fingerprinting in Practical Environment
  - Shigemi Ishida, Sou Takaki, Takahiro Yamamoto, Shigeaki Tagashira and Akira Fukuda
- Toward Sustainable Smart Mobility Information Infrastructure Platform - Current Status -
  - Akira Fukuda, Tsuneo Nakanishi, Kenji Hisazumi, Kunihiko Kaneko, Shigeaki Tagashira, Tsunenori Mine, Yutaka Arakawa, Shigemi Ishida, Takahiro Ando, Shuichi Ashihara, Masakatsu Ura, Yoshimichi Nakamura, Soichiro Nakamura, Weiqiang Kong and Guoqiang Li
- A Survey of Formal Techniques for Hardware/Software Co-Verification
  - Kun Liu, Weiqiang Kong, Gang Hou and Akira Fukuda
- Analysis of Interrupt Behavior Based on Probabilistic Model Checking
  - Hou Gang, Kong Weiqiang, Zhou Kuanjiu, Wang Jie, Cao Xun and Fukuda Akira

BMOT-SS2 Room C
Session Co-Chairs: Tokuro Matsuo (Advanced Institute of Industrial Technology, Japan), Hidekazu Iwamoto (Josai International University, Japan)
- Multilingual Review Analysis for Attracting Foreign Visitors to Local Cities -About Sightseeing in Hamamatsu city-
  - Yasushi Sugiyama, Jianping Zheng, Tokuro Matsuo, Hidekazu Iwamoto and Teruhisa Hochin
- Comparison of Motivation of Participation to International Conferences between Asians and Non-Asians
  - Yasushi Sugiyama, Tokuro Matsuo, Hidekazu Iwamoto and Teruhisa Hochin
- International Convention Destination: Researchers’ Preferences and Requirements
  - Hidekazu Iwamoto, Tokuro Matsuo and Yasushi Sugiyama

IDDC-SS1 Room D
Session Chair: Ziran Fan (Toyo University, Japan)
- Ideology of AoD: Analog On Digital-Operating Digitized Objects and Experiences with Analog-like Approach
  - Takayuki Fujimoto
- Proposal of a Scheduling App Utilizing Time-Perception-Reality in Analog Clocks
  - Ziran Fan and Takayuki Fujimoto
- A Design of Application to Turn a Smartphone into a Computer Mouse and Possibility of Preventing from Being Copied
  - Yui Tanaka and Takayuki Fujimoto
- A Proposal for "Infinite Scale" Ruler Application that Provides Analog-like "Sensory Reality"
  - Kazuya Murata, Eigo Ito and Takayuki Fujimoto

LTLE-5 Room E
Session Chair: Yuichi Ono (University of Tsukuba, Japan)
- Holonomic Approach for Item Response Theory Parameter Estimation
  - Kazuhisa Noguchi and Eisuke Ito
- Enhancing High-School Students’ Computational Thinking with Educational Robotics Learning
  - Sasithorn Chookaew, Suppachai Howimamporn, Pornjit Pratumsuwan, Santi Hutamarn, Warin Sootkaneung and Charoenchai Wongwatkit
- Study of manga reading comprehension and teaching methods for manga reading
  - Kiichiro Okubo, Kazunori Sato, Yuichi Wada, Kazuyuki Asai, Shunichi Kubo and Tatsuya Horita
- Construction of Teaching Assistant Robot in Programming Class
  - Kazuyoshi Yoshino and Shanjun Zhang
An Augmented Reality to Support Mobile Game-based Learning in Science Museum on Biodiversity
- Nongluk Meekaew and Watcharee Ketpichainarong

Behavior Analysis of Learning Methods to Overcome Stress or Pressure on Learning Situation
- Kosuke Kaneko and Wang Jingyun

**ACIS CSII-1**

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

- MULESOFT - Salesforce Integration using Batch Processing
  - Manvi Seth
- A branch-and-bound based exact algorithm for the maximum edge-weight clique problem
  - Satoshi Shimizu, Kazuaki Yamaguchi, Sumio Masuda
- An Interactive Storybook-Creation Tool on a Tablet for Kindergarteners
  - Yusuke Niwa, Yasuji Katase, Chieko Hiramatsu
- A multi-objective minimum matrix search algorithm applied to large-scale bi-objective TSP
  - Michael Smith, Yun-Shiou Chen
- Stubs and Drivers Generator for Object-Oriented Program Testing using Sequence and Class Diagrams
  - Peerawut Luengruengroj, Taratip Suwannasart
- Extracting Paper Sticky Notes with Visual-Intial Odometry of ARKit
  - Eishun Ito, Tadachika Ozono and Toramatsu Shintani
- Developing a Linked Data-based Weekly Report Management System
  - Rikiya Ando, Tadachika Ozono and Toramatsu Shintani

**ACIS BCD-4**

Session Chair: Akinori Ihara (Wakayama University, Japan)

- Tool Breakage Detection using Deep Learning
  - Guang Li, Xin Yang, Duanbing Chen, Anxing Song, Yuke Fang and Junlin Zhou
- Frequent Closed Itemsets More than Size K and Its On-Line Approximation Mining
  - Takumi Nishina, Koji Iwanuma and Yoshitaka Yamamoto
- TOP: An efficient Two-levels of Positive Resampling Framework for Class Imbalanced Data
  - Nathaniel Netirungroj and Eakasit Pacharawongsakda
- A Study of Practical Education Program on AI, Big Data, and Cloud Computing through Development of Automatic Ordering System
  - Sachio Saiki, Naoki Fukuyasu, Kohei Ichikawa, Tetsuya Kanda, Masahide Nakamura, Shinsuke Matsumoto, Shinichi Yoshida and Shinji Kusumoto

**SCAI-SSi-2**

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

- An Evolutionary Approach for Simulating Continuous Coalition Formation
  - Masaki Horie and Naoki Fukuta
- A Social Networking Support System to Rise up the One's Self-Evaluation
  - Takuma Matsushita and Naoki Fukuta
- A Simulation-based Interactive Tuning Approach for the Parameter Optimization of Privacy-preserved Prediction Markets
  - Takumi Sato and Naoki Fukuta
- Toward Optimization of Elicitation Timings considering Elicitation Costs and User Privacy for Personal Assistant Agents
  - Sho Oishi and Naoki Fukuta

**LTLE-SS3**

Session Chair: Jingyun Wang (Kyushu University, University of Tsukuba, Japan)

- Pair-programming Curriculum Development of Motion-based Game for Enhancing Computational Thinking Skills
  - Chih-Kai Chang
- Building a Simulated Blockly-Arduino-based Programming Learning Tool: A Preliminary Study
  - Jun-Ming Su and Ting-Wei Lin
- Exploring an approach for grouping through predicting group performance from analysis of learner characteristics
  - Jingyun Wang and Kentaro Kojima
IDDC-2

Session Chair: Arisa Fujinoki (Toyo University, Japan)

- Guest Speaker in IDDC2018: Prof/Dr. Tadachika Ozono (Nagoya Institute Technology, Japan)
- Study on Aesthetic Impression of Female Body Type and Posture
  - Masami Miyazaki, Toru Sugahara, Ryuma Onose, Yuko Yamaguti, Taizo Kishimoto, Satoko Ueke and Hiroma Kurono
- Development and evaluation of an exaggerated expression animation support system using Maya
  - Yusuke Sakai, Satoshi Cho and Hisashi Sato
- Developing a Management System and Interface for Instant Application Window Sharing
  - Iwata Satoru, Tadachika Ozono and Toramatsu Shintani

DSIR

Session Chair: Soichiro Aihara (Shibaura Institute of Technology, Japan)

- Identifying Factors Contributing to University Dropout with Sparse Logistic Regression
  - Gen Hori
- Examining the Character Traits of Students Participating in an Educational Program for Developing Proactive Behavior
  - Yoko Nakazato and Takashi Tsumagari
- Implementation of Active Learning Strategies in a Large-Enrollment Economics Class at a University
  - Tomohiko Sato, Mami Mitachi and Tetsutaro Okada
- Doctoral Students in the American Research Universities: The Difference by Major Field
  - Soichiro Aihara

ACIS CSII-2

Session Chair: Yuya Yokoyama (Kyoto Prefectural University, Japan)

- A Data Migration Scheme Considering Node Reliability for an Autonomous Distributed Storage System
  - Atsushi Nunome, Hiroaki Hirata
- A Study on Social Graph Analysis Using Beacon Bluetooth Radio Transmitter
  - Makoto Takamatsu, Tsuyoshi Tomioka, Seiji Ishihara, Eizaburo Iwata, Makoto Hasegawa
- GUI Testing for Introductory Object-Oriented Programming Exercises
  - Ushio Inoue
- Python Deserialization Denial of Services Attacks and their Mitigations
  - Kousei Tanaka, Taiichi Saito
- Deep Learning based Bangla Speech-to-Text Conversion
  - Md. Tahsin Tausif, Sayontan Chowdhury, Md. Shiplu Hawlader, Md. Hasanuzzaman , Hasnain Heickal
- End-to-End Speech Synthesis for Bangla with Text Normalization
  - Tanzir Islam, Shahreen Salim, Shabbir Ahmed , Hasnain Heickal

ACIS BCD-5

Session Chair: Hirohisa Aman (Ehime University, Japan)

- Cancer Gene Analysis of Microarray Data
  - Shuichi Shinmura
- Community Information’s Effects on User Emotions and Behaviors
  - Yulin Chen

ESKM-SS1-2

Session Chair: Tsunenori Mine (Kyushu University, Japan)

- Overview and Application Examples of Agent-Based Unified Simulation Environment
  - Takahiro Ando, Ryo Fujii, Kenji Hisazumi, Tsunenori Mine, Tsuneo Nakanishi and Akih Fukuda
- A Process of Uncertainty Handling Method to Smart Mobility Application Development
  - Hiromasa Inoki, Kenji Hisazumi, Takahiro Ando, Akira Fukuda and Tsuneo Nakanishi
- Design and Development of Integrated Map Database System to Store and Share Map Datasets
  - Kunihiko Kaneko
- ItoCamLife: a platform of sharing and recommending information considering user contexts to facilitate smart mobility
  - Tsunenori Mine, Hiroyuki Nakamura, Shiro Mise, Takuya Hiraoki, Shiori Koga, Takahiro Ando, Kenji
Hisazumi, Tsuneo Nakanishi and Akira Fukuda

Software Engineering Practices for the Smart Mobility Market

Tsuneo Nakanishi, Kenji Hisazumi, Takahiro Ando, Akira Fukuda and Tsunenori Mine

EAIS-2
Room C
Session Chair: Atsushi Shimoda, Chiba Institute of Technology, Japan

- Application of Particle Swarm Optimization to Solve Configuration Change Problems
  - Z.H. Che, H.S. Wang, P.C. Huang, P.C. Chang and Y.S. Lee
- Operating cyber-physical systems with microservices: a conceptual modelling approach
  - Michael Walch
- Contribution of Patent Indicators to China Stock Performance
  - Tsui-Min Chen, Chiu-Chi Wei and Hui-Chong Che
- A Hypergraph Based Formal Description Technique for Enterprise Architecture Representation
  - Dóra Öri and Bálint Molnár
- Priority Order Determination Method for Extracting Services Stepwise from Monolithic System
  - Atsushi Shimoda and Tsubasa Sunada

IDDC-SS2
Room D
Session Chair: Kazuya Murata (Toyo University, Japan)

- Corporate Identity System Design via Collective Intelligence
  - Yu-Lin Hsu
- SNS as Means of Information Gathering
  - Taishi Nemoto and Takayuki Fujimoto
- Prototype of word-of-mouth video SNS to support reliable and accurate information
  - Arisa Fujinoki and Takayuki Fujimoto
- A Concept of Multi-lingual Translation Application
  - Yang Li

SCAI-4
Room E
Session Chair: Naoki Fukuta (Shizuoka University, Japan)

- Common sensing and Analyses to visualize a Production Process with Parallel Utilized Resource-Job-shop and Flow-shop cases
  - Motoharu Tanaka, Takuya Nagata and Sumika Arima
- Development and Evaluation of a Hybrid-flow Scheduling System for Make-to-Order Production
  - Kenta Shinoda and Sumika Arima
- Double-loop controller tuning based Fictitious Reference Iterative Tuning (FRIT) for unmanned ground vehicle
  - Chaiyaporn Silawatchananaei, Piyamun Ruangurai and Niphon Lapapanplan
- A Personal Conversation Assistant Based on Seq2seq with Word2vec Cognitive Map
  - Maoyuan Shen and Runhe Huang
- Automation of Personal Food Computers for Research in Drug Development and Biomedicine
  - Almog Bounos, Suganya Chandrababu and Dhundy R. Bastola

ACIS CSII-3
Room F
Session Co-Chairs: Masashi Kawaguchi (National Institute of Technology, Suzuka College, Japan), Hiroki Nomiya (Kyoto Institute of Technology, Japan)

- Convolutional Neural Network Models for Scattering Pattern Recognition of Scanning Electron Microscopy Images
  - Manop Phankokkruad and Sirirat Wacharawichanant
- Effective Fusion of Disaster-relief Agent in RoboCupRescue Simulation
  - Taishun Kusaka, Yuki Miyamoto, Akira Hasegawa, Shunki Takami, Kazunori Iwata, Nobuhiro Ito
- AC Transmission Signal Neural Circuit and the Design of Deep Learning Model
  - Masashi Kawaguchi, Naohiro Ishii and Masayoshi Umeno
- Shape Recovery using Improved Fast Marching Method for SEM Image
  - Yuji Iwahori, Lei Huang, Aili Wang and M. K. Bhuyan
- Estimation of Facial Expression Intensity for Lifelog Videos Retrieval
  - Yamato Shinohara, Hiroki Nomiya, Teruhisa Hochin
- Improvement of Emotional Video Scene Retrieval System for Lifelog Videos Based on Facial Expression Intensity
  - Kazuya Sugawara, Hiroki Nomiya, Teruhisa Hochin
- Detection of Dangerous Behavior by Estimation of Head Pose and Moving Direction

- Estimation of Facial Expression Intensity for Lifelog Videos Retrieval
  - Yamato Shinohara, Hiroki Nomiya, Teruhisa Hochin
ACIS BCD-SS  Room G
Session Chair: Kiyoshi Honda (Waseda University, Japan)
- Analyzing Software Maintenance Cost Based on Work Efficiency and Unit Cost
  - Masateru Tsunoda, Kenichi Matsumoto, Tomoki Oshino and Sawako Ohiwa.
- Do Review Feedbacks Influence to a Contributor's Time Spent on OSS Projects?
  - Takuto Norikane, Akinori Ihara and Kenichi Matsumoto

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July 12 (Thu), 2018

9:30PM-11:30PM

ACIS BCD-6  Room E
Session Chair: Akinori Ihara (Wakayama University, Japan)
- Characteristics of source code degrading quality in software development by multiple organizations
  - Ryo Ishizuka, Naohiko Tsuda, Hironori Washizaki, Yoshiaki Fukazawa, Shunsuke Sugimura and Yuichiro Yasuda
- Understanding Popularity Growth of Packages in JavaScript Package Ecosystem
  - Shi Qiu, Raula Gaikovina Kula and Katsuro Inoue
- Fault-Prone Source File Analysis Focusing on the Contribution Entropy in Open Source Development
  - Kazuki Yamauchi, Hirohisa Aman, Sousuke Amasaki, Tomoyuki Yokogawa and Minoru Kawahara
- BCD Conference Adjournment by Akinori Ihara (Wakayama University, Japan)

Forum Discussion (Invitation-Only)  Room S
Session Chair: Naoki Fukuta (Shizuoka University, Japan)

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July 13 (Fri), 2018

Forum Discussion (Invitation-Only)  Room S
Session Chair: Naoki Fukuta (Shizuoka University, Japan)