

# First International Conference on Big Data Analysis and Deep Learning Applications (ICBDL 2018)

## Conference Program Schedule

Monday, May 14<sup>th</sup> 2018

Time	Fountain Room (Seagaia Convention Center, 2 <sup>nd</sup> Floor)
9:00	Registration Open
9:00~9:10	Opening Ceremony
	Welcome Message from Conference General Chair
9:10~9:15	Message from Conference Program Chair
9:15~9:55	Keynote Speaker #1 (Prof. KRV Raja Subramanian) <b>Title:</b> <i>Challenges in Computer Science Education in an Era of Disruptive Technologies</i>
10:00~10:40	Keynote Speaker #2 (Prof. Etsuo Chosa) <b>Title:</b> <i>Screening for musculoskeletal (locomotive organs) problems, survey on physical fitness and motor abilities analysis in schoolchildren</i>
10:40~11:00	Coffee Break
11:00~12:15	Paper Presentation ( <b>Session 1:</b> Data Mining and its Applications I)
12:15~13:00	Lunch Break
13:00~13:40	Keynote Speaker #3 (Prof. Hiroyuki Yoshihara) <b>Title:</b> <i>Millennial medical record project: Toward establishment of authentic Japanese version EHR and secondary use of medical data</i>
13:45~15:00	Paper Presentation ( <b>Session 2:</b> Big Data Analysis I + Intelligent Systems I)
15:00~15:15	Coffee Break
15:15~16:30	Paper Presentation ( <b>Session 3:</b> Information Communication Systems and Applications )
16:40~18:10	Paper Presentation ( <b>Session 4:</b> Deep Learning and its Applications + Video Monitoring System and Applications I)
18:30~20:30	(18:30~19:00) <b>Special Lecture</b> (Prof. Masahito Suiko) <b>Title:</b> <i>The Strength of Miyazaki "Honkaku Shochu"</i>
	<b>Conference Banquet</b> (Orchard Room, Seagaia Convention Center, 2 <sup>nd</sup> Floor)

**Tuesday, May 15<sup>th</sup> 2018**

<b>Time</b>	<b>Fountain Room (Seagaia Convention Center, 2<sup>nd</sup> Floor)</b>
9:00~10:45	Paper Presentation ( <b>Session 5:</b> Big Data Analysis II + Intelligent Systems II)
10:45~11:00	Coffee Break
11:00~12:30	Paper Presentation ( <b>Session 6:</b> Data Mining and its Applications II + Video Monitoring System and Applications II)
12:30~13:00	Lunch Break
13:00~14:30	Paper Presentation ( <b>Session 7:</b> Image and Multimedia Processing I)
14:35~15:50	Paper Presentation ( <b>Session 8:</b> Image and Multimedia Processing II)

**Note:** There will be 15 minutes of oral presentation for each presenter including questions and answers time.

## **Sessions Details (Paper Titles and Presenters)**

### **Presentation on May 14<sup>th</sup>**

#### **[11:00~12:15] Session 1: Data Mining and its Application I**

Chair: **Dr. Myint Myint Than**, Executive Director, Myanmar Computer Federation, Myanmar

- 1) **School Mapping for Schools of Basic Education in Myanmar**  
*Myint Myint Sein, Saw Zay Maung Maung, Myat Thiri Khine, K -zin Phyto, Thida Aung, Phyto Pa Pa Tun (University of Computer Studies, Yangon, Myanmar)*
- 2) **GBSO-RSS: GPU-based BSO for Rules Space Summarization**  
*Youcef Djenouri (IMADA, Computer Science Department, Southern Denmark University, Odense, Denmark), Jerry Chun-Wei Lin (Harbin Institute of Technology Shenzhen Graduate School, School of Computer Science and Technology, Shenzhen, China), Djamel Djenouri (CERIST CENTER RESEARCH, Algiers, ALGERIA), Asma Belhadi (RIMA, USTHB, Algiers, Algeria), Philippe Fournier-Viger (Harbin Institute of Technology (Shenzhen), Shenzhen, China)*
- 3) **Machine Learning Based Live VM Migration for Efficient Cloud Data Center**  
*Ei Phyu Zaw (University of Computer Studies, Patheingyi, Myanmar)*
- 4) **Dynamic Replication Management Scheme for Distributed File System**  
*May Phyu Thu, Khine Moe Nwe, Kyar Nyo Aye (Faculty of Computer Science, University of Computer Studies, Yangon, Myanmar)*
- 5) **Frequent Pattern Mining for Dynamic Database by Using Hadoop GM-Tree and Gtree**  
*Than Htike Aung, Nang Saing Moon Kham (Information Science Department, University of Computer Studies, Yangon, Myanmar)*

## [13:45~15:00] Session 2: Big Data Analysis I + Intelligent Systems I

Chair: **Dr. Noritaka Shigei**, Kagoshima University, Japan

- 1) **Data-Driven Constrained Evolutionary Scheme for Predicting Price of Individual Stock in Dynamic Market Environment**  
*Henry. S. Y. Tang, Dr. Lai, Jean Hok Yin (Hong Kong Baptist University, Hong Kong)*
- 2) **Predictive Big Data Analytics using Multiple Linear Regression Model**  
*Kyi Lai Lai Khine, Thi Thi Soe Nyunt (University of Computer Studies, Yangon, Myanmar)*
- 3) **Evaluation for Teacher's Ability and Forecasting Student's Career Based on Big Data**  
*Zun Hlaing Moe, Thida San, Hlaing May Tin, Nan Yu Hlaing, Mie Mie Tin (Myanmar Institute of Information Technology, Myanmar)*
- 4) **Front Caster Capable of Reducing Horizontal Forces on Step Climbing**  
*Geunho Lee (Department of Environmental Robotics, University of Miyazaki, Japan), (OHNUMA ROBO & DESIGN LLC), Masaki Shiraishi, Hiroki Tamura, Kikuhito Kawasue (Department of Environmental Robotics, University of Miyazaki, Japan)*
- 5) **Mobile Location Based Indexing for Range Searching**  
*Thu Thu Zan, Sabai Phyu (University of Computer Studies, Yangon, Myanmar)*

## [15:15~16:30] Session 3: Information Communication Systems and Applications

Chair: **Dr. Amane Takei**, University of Miyazaki, Japan

- 1) **FDTD Based Numerical Calculation of Electromagnetic Wave Radiation in Multi-Layer Circular Cylindrical Human Head**  
*Zin Mar Lwin (Interdisciplinary Graduate School of Agriculture and Engineering, University of Miyazaki, Japan), Mitsuhiro Yokota (Department of Electrical and Systems Engineering, University of Miyazaki, Japan)*
- 2) **Improved Convergence in Eddy-Current Analysis by Singular Value Decomposition of Subdomain Problem**  
*Takehito Mizuma, Amane Takei (University of Miyazaki, Japan)*
- 3) **Development and validation of parallel acoustic analysis method for the sound field design of a large space**  
*Yuya Murakami, Kota Yamamoto, Amane Takei (University of Miyazaki, Japan)*
- 4) **Secret Audio Messages Hiding in Images**  
*Saw Win Naing, Tin Myint Naing (Faculty of Information and Communication Technology, University of Technology (Yatanarpon Cyber City), Pyin Oo Lwin, Myanmar)*
- 5) **Location Based Personal Task Reminder System using GPS Technology**  
*Thwet Hmue Nyein, Aye Mon Yee (Department of Information Science, University of Technology (Yatanarpon Cyber City), Myanmar)*

## [16:40~18:10] Session 4: Deep Learning and its Applications + Video Monitoring System and Applications I

Chair: **Prof. Mitsuhiro Yokota**, University of Miyazaki, Japan

- 1) **Accuracy Improvement of Accelerometer-Based Location Estimation Using Neural Network**  
*Noritaka Shigei, Hiroki Urakawa, Yoshihiro Nakamura (Kagoshima University, Kagoshima 890-0065, Japan), Masahiro Teramura (National Institute of Technology, Sasebo College, Sasebo 857-1193, Japan), Hiromi Miyajima (Former Kagoshima University)*
- 2) **Transparent Object Detection Using Convolutional Neural Network**  
*May Phyo Khaing, Mukunoki Masayuki (Graduate School of Engineering, University of Miyazaki, Japan)*
- 3) **Multi-Label Land Cover Indices Classification of Satellite Images using Deep Learning**  
*Su Wit Yi Aung, Soe Soe Khaing, Shwe Thinzar Aung (Faculty of Information and Communication Technology, University of Technology (Yatanarpon Cyber City), Pyin Oo Lwin, Myanmar)*
- 4) **Real-time Hand Pose Recognition Using Faster Region-based Convolutional Neural Network**  
*Hsu Mon Soe, Tin Myint Naing (University of Technology (Yatanarpon Cyber City) Pyin Oo Lwin, Myanmar)*
- 5) **A Study on Estrus Detection of Cattle Combining Video Image and Sensor Information**  
*Tetsuya Hirata (Faculty of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan), Ikuo Kobayashi (Field Science Center, Faculty of Agriculture, University of Miyazaki, Japan), Hiromitsu Hama (Osaka City University, Japan)*
- 6) **Behavior Analysis for Nursing Home Monitoring System**  
*Pann Thinzar Seint (Graduate School of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan)*

## Presentation on May 15<sup>th</sup>

## [9:00~10:45] Session 5: Big Data Analysis II + Intelligent Systems II

Chair: **Prof. Pyke Tin**, University of Miyazaki, Japan

- 1) **Tweets Sentiment Analysis for Healthcare on Big Data Processing and IoT Architecture using Maximum Entropy Classifier**  
*Hein Htet, Soe Soe Khaing, Yi Yi Myint (University of Technology (Yatanarpon Cyber City), Myanmar)*
- 2) **A Survey on Influence and Information Diffusion in Twitter using Big Data Analytics**  
*Radia EL BACHA (Graduate School of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan)*
- 3) **Real Time Semantic Events Detection from Social Media Stream**  
*Phyu Phyu Khaing, Than Nwe Aung (University of Computer Studies Mandalay, Myanmar)*
- 4) **Community and Outliers Detection in Social Network**  
*Htwe Nu Win (University of Computer Studies, Mandalay, Myanmar), Khin Thidar Lynn (Faculty of Information Science, University of Computer Studies, Mandalay, Myanmar)*

- 5) **Analyzing Sentiment Level of Social Media Data Based on SVM and Naïve Bayes Algorithms**  
*Hsu Wai Naing, Aye Chan Mon, Phyu Thwe, Naw Naw (Department of Information Science, University of Technology (Yatanarpon Cyber City), Myanmar)*
- 6) **Building Travel Speed Estimation Model for Yangon City from Public Transport Trajectory Data**  
*Thura Kyaw, Nyein Nyein Oo, Win Zaw (Department of Computer Engineering and Information Technology, Yangon Technological University, Myanmar)*
- 7) **Comparison between Block-Encoding and Quadtree Compression Methods for Raster Maps**  
*Phyo Phyo Wai, Su Su Hlaing, Khin Lay Mon, Mie Mie Tin, Mie Mie Khin (Myanmar Institute of Information Technology, Myanmar)*

## [11:00~12:30] Session 6: Data Mining and its Applications II + Video Monitoring System and Applications II

Chair: **Prof. Hiromitsu Hama**, Osaka City University, Japan

- 1) **Investigation of the Use of Learning Management Systems (Moodle) in University of Computer Studies, Mandalay**  
*Thinzar Saw, Kyu Kyu Win, Zan Mo Mo Aung, Myat Su Oo (University of Computer Studies, Mandalay, Myanmar)*
- 2) **User Preference Information Retrieval by using Multiplicative Adaptive Refinement Search Algorithm**  
*Nan Yu Hlaing, Myintzu Phyo Aung (Myanmar Institute of Information Technology, Mandalay, Myanmar)*
- 3) **Proposed Framework for Stochastic Parsing of Myanmar Language**  
*Myintzu Phyo Aung, Ohnmar Aung, Nan Yu Hlaing (Myanmar Institute of Information Technology, Myanmar)*
- 4) **A Study on Detection of Abnormal Behavior by a Surveillance Camera Image**  
*Hiroaki Tsushita (Graduate School of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan)*
- 5) **A Study on Detection of Suspicious Persons for Intelligent Monitoring System**  
*Tatsuya Ishikawa (Graduate school of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan)*
- 6) **A Study on Violence Behavior Detection System between Two Persons**  
*Atsuki Kawano (Graduate School of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan)*

## [13:00~14:30] Session 7: Image and Multimedia Processing I

Chair: **Prof. Myint Myint Sein**, University of Computer Studies, Yangon, Myanmar

- 1) **Object Detection and Recognition System for Pick and Place Robot**  
*Aung Kaung Sat, Thuzar Tint (Department of Information Science, University of Technology (Yatanarpon Cyber City), Myanmar)*
- 2) **Myanmar Rice Grain Classification Using Image Processing Techniques**  
*Mie Mie Tin, Khin Lay Mon, Ei Phyu Win, Su Su Hlaing (Myanmar Institute of Information Technology, Myanmar)*
- 3) **Color Segmentation based on Human Perception Using Fuzzy Logic**  
*Tin Mar Kyi, Khin Chan Myae Zin (Myanmar Institute of Information Technology, Myanmar)*
- 4) **Key Frame Extraction Techniques**  
*Mie Mie Khin, Zin Mar Win, Phyo Phyo Wai, Khaing Thazin Min (Myanmar Institute of Information Technology, Myanmar)*
- 5) **A Study on Music Retrieval System Using Image Processing**  
*Emi Takaoka (Graduate School of Engineering, University of Miyazaki, Japan), Thi Thi Zin (Faculty of Engineering, University of Miyazaki, Japan)*
- 6) **Analysis of Environmental Change Detection using Satellite Images (Case Study: Irrawaddy Delta, Myanmar)**  
*Soe Soe Khaing, Su Wit Yi Aung, Shwe Thinzar Aung (University of Technology (Yatanarpon Cyber City), Myanmar)*

## [14:35~15:50] Session 8: Image and Multimedia Processing II

Chair: **Dr. Soe Soe Khaing**, University of Technology (Yatanarpon Cyber City), Myanmar

- 1) **Analysis of Land Cover Change Detection Using Satellite Images in Patheingyi Township**  
*Hnin Phyu Phyu Aung, Shwe Thinzar Aung (Department of Information Science, University of Technology (Yatanarpon Cyber City), Myanmar)*
- 2) **Environmental Change Detection Analysis in Magway Division, Myanmar**  
*Ei Moh Moh Aung, Thu Zar Tint (Faculty of Information and Communication Technology, University of Technology (Yatanarpon Cyber City), Pyin Oo Lwin, Myanmar)*
- 3) **Fingerprint Image Retrieval Based on SURF and MSER Feature**  
*Nan Yu Hlaing, Ohnmar Aung, Khaing Thazin Min (Myanmar Institute of Information Technology, Mandalay, Myanmar)*
- 4) **Lung Cancer Stages Detection and Classification on CT Scan Images using Artificial Neural Network**  
*Kyawt Kyawt Htay, Nwe Ni Kyaw, Phyo Hay Mar Wai, Hanni Htun (Myanmar Institute of Information Technology, Mandalay, Myanmar)*
- 5) **Measuring Software Complexity using Open Source Tools**  
*Cho Thet Mon, Han Su Wai (Myanmar Institute of Information Technology, Mandalay, Myanmar)*

## **Shuttle Bus Time**

### **May 14<sup>th</sup>**

[7:50 am] From Kiyotake (Miyazaki University) Hospital bus stop to Seagaia Convention Center

[8:45 pm] Shuttle bus will be go back to Kiyotake (Miyazaki University) Hospital bus stop.

### **May 15<sup>th</sup>**

[7:50 am] From Kiyotake (Miyazaki University) Hospital bus stop to Seagaia Convention Center

[4:00 pm] Shuttle bus will be go back to Kiyotake (Miyazaki University) bus stop.