



7th International Conference on Informatics, Electronics & Vision

25~28 June, 2018 | Kitakyushu International Conference Center, Fukuoka, Japan

2nd International Conference on Imaging, Vision & Pattern Recognition



Final Program *(tentative)* 25th June, 2018 (Monday)

1200 ~1330	Registration, Lunch & Conference Kit Collection
1330 ~ 1530	<p>Tutorial 1: <i>At Room 21AB</i> Non-Orthogonal Multiple Access (NOMA) in 5G and Beyond in the Era of Spectrum Scarcity Speaker: S.M. Riazul Islam Assistant Professor, Dept. of Computer Science and Engineering, Sejong University, South Korea</p>
1530 ~ 1600	Coffee Break
1600 ~ 1730	<p>Tutorial 2: <i>At Room 21CD</i> Raspberry Pi for Computer Vision, PiLab Hands-on Tutorial. Speakers: Shu Isaka, Department of Electrical and Electronic Engineering, Mie University, Japan. Takumi Kitajima, Department of Public Health and Occupational Medicine, Graduate State of Medicine, Mie University, Japan. Atsushi Inoue, College of Business and Public Administration Eastern Washington University, USA</p>
1730 ~ 1830	Welcome reception

26th June, 2018 (Tuesday)

0800 ~ 0900	Registration, Breakfast & Conference Kit Collection
0845 ~ 0900	Opening of Technical sessions
0900 ~ 1015	<p>Session 1-A: <i>At Room 22</i> <i>Session Chair:</i> <i>Regular Session: IoT, Control and Automation I</i> Paper ID: 123; 145; 161; 256;</p> <hr/> <p>Session 1-B: <i>At Room 21CD</i> <i>Session Chair:</i> TBA</p>

	<p><i>Regular Session: Computer Vision I</i> Paper ID: 22; 24; 50; 59; 63;</p> <hr/> <p>Session 1-C: At Room 21AB <i>Session Chair: Norliza Mohd Noor</i> <i>Special Session(SS2) Deep learning for pattern recognition</i> Paper ID: 13; 201; 227, 262, 265</p>
1015~ 1055	<p>Keynote Session-1: Intl. Conf. Room <i>Session Chair: Atiqur Rahman Ahad</i> TITLE TBA Speaker: Takeshi Yamakawa, FIEEE, Fuzzy Logic Systems Institute, Japan Former Vice-President, Sozo University, Japan</p>
1055 ~ 1120	Coffee Break-1
1120 ~ 1220	<p>Session 2-A: Intl. Conf. Room <i>Session Chair: Tan Chee Pin</i> Invited Talk 1: Joint Intensity and Spatial Metric Learning for Robust Gait Recognition Speaker: Yasushi Makihara, Osaka University, Japan</p> <p><i>Invited Talk 2: Developing Social Services based on Cyber Physical System</i> Speaker: Rin-ichiro Taniguchi, Kyushu University, Japan</p> <hr/> <p>Session 2-B: At Room 22 <i>Session Chair: TBA</i> <i>Regular Session: Electronics I</i> Paper ID: 72; 121; 151; 240;</p> <hr/> <p>Session 2-C: At Room 21CD <i>Session Chair: TBA</i> <i>Regular Session: Informatics and IT-1</i> Paper ID: 4; 12; 23; 35;</p> <hr/> <p><i>Room 21AB (Lunch Preparation)</i></p>
1220 ~ 1350	Lunch break
1300 ~ 1340	<p>Luncheon Talk Keynote Session-2: Intl. Conf. Room <i>Session Chair: TBA</i> TITLE TBA Shinichi Yoshiya, MD Dept. of Orthopaedic Surgery, Hyogo College of Medicine, Japan</p>
1350 ~ 1520	<p>Session 3-A: Intl. Conf. Room <i>Session Chair: Yasushi Makihara</i> Invited Talk 3: Estimation of bounded faults using sliding mode observers Speaker: Tan Chee Pin, Monash University Malaysia, Malaysia</p>

	<p><i>Invited Talk 4: Overview of Deep Learning and Its Advanced Applications in Medical Image Processing, Analysis, and Diagnosis</i> Speaker: Kenji Suzuki, Illinois Institute of Technology, USA</p> <p><i>Invited Talk : TBA</i></p> <hr/> <p>Session 3-B: At Room 22 <i>Session Chair:</i> TBA <i>Regular Session: Pattern Recognition and Machine Learning I</i> Paper ID: 168; 232; 233; 238; 239; 274;</p> <hr/> <p>Session 3-C: At Room 21CD <i>Session Chair:</i> TBA <i>Regular Session: Image Processing I</i> Paper ID: 7; 21; 34; 115; 214;</p> <hr/> <p>Session 3-D: At Room 21AB <i>Session Chair:</i> TBA <i>Regular Session: Soft Computing and Computational Intelligence</i> Paper ID: 55; 124; 142; 144; 218; 254;</p>
1520 ~ 1545	Coffee Break-2
1545 ~ 1645	<p><i>Session 4-A: Intl. Conf. Room</i> <i>Session Chair:</i> TBA <i>Invited Talk 5: Road-Speed Profile for Enhanced Perception of Traffic Conditions</i> Speaker: M.A.S. Kamal, School of Engineering, Monash University, Malaysia</p> <p><i>Invited Talk 6: How to Conduct a Big Data Research in Real Fields?</i> Speaker: Sozo Inoue, Kyushu Institute of Technology, Japan</p> <hr/> <p><i>Session 4-B : At Room 22</i> <i>Session Chair:</i> B M Mainul Hossain <i>Special Session(SS10) Software Engineering for Quality Assurance I</i> Paper ID: 43; 251; 255</p> <hr/> <p><i>Session 4-C: At Room 21CD</i> <i>Session Chair:</i> TBA <i>Regular Session: Informatics and IT-II</i> Paper ID: 169; 194; 235; 253;</p> <hr/> <p><i>Session 4-D: At Room 21AB</i> TBA</p>
1645~ 1725	<p>Keynote Session-3: <i>Intl. Conf. Room</i> <i>Session Chair:</i>TBA Human Gait Analysis Speaker: Yasushi Yagi, Vice-President, Osaka University, Japan</p>

27th June, 2018 (Wednesday)

0800 ~ 0900	Registration, Breakfast & Conference Kit Collection
0900 ~ 1000	<p>Session 5-A: <i>At Room 22</i> <i>Session Chair:</i> TBA <i>Regular Session:</i> Information Theory and Systems I Paper ID: 45; 58; 66; 77;</p> <hr/> <p>Session 5-B: <i>At Room 21CD</i> <i>Session Chair:</i> Tom Shibata, Kyushu Institute of Technology, JP <i>Regular Session:</i> Computer Vision II Paper ID: 153; 160; 136; 163;</p> <hr/> <p>Session 5-C: <i>At Room 21AB</i> <i>Session Chair:</i> TBA <i>Regular Session:</i> IoT, Control and Automation II Paper ID: 70; 156; 205;</p>
1000~ 1040	<p>Keynote Session-4: <i>Intl. Conf. Room</i> <i>Session Chair:</i> TBA Ellipse Fitting for Computer Vision Speaker: Kenichi Kanatani, Okayama University, Japan</p>
1040 ~ 1100	Coffee Break-1
1100 ~ 1200	<p>Session 6-A: <i>Intl. Conf. Room</i> <i>Session Chair:</i> TBA <i>Invited Talk 7:</i> TITLE TBA Speaker: M Julius Hossain, European Molecular Biology Lab (EMBL), Germany</p> <p><i>Invited Talk 8:</i> TITLE TBA Speaker: Syoji Kobashi, SMIEEE, Director, Advanced Medical Engineering Center (AMEC), University of Hyogo, Japan</p> <hr/> <p>Session 6-B: <i>At Room 22</i> <i>Session Chair:</i> Iakov Korovin <i>Special Session(SS3):</i> Recent advances in Digital Oilfield Paper ID:285; 286; 287</p> <hr/> <p>Session 6-C: <i>At Room 21CD</i> <i>Session Chair:</i> M. T. I. Khan <i>Special Session(SS8):</i> Signal Processing for Biomedical and Industrial Applications Paper ID: 52, 133; 178;</p> <hr/> <p>Session 6-D: <i>At Sub-foyer</i> <i>Session Chair:</i> TBA <i>Poster Session:</i> Student Papers Paper ID: 28; 146; 164; 217; 257; 260; 272; 283</p> <hr/> <p><i>Room 21AB (Lunch Preparation)</i></p>

1200 ~ 1320	Lunch
1320 ~ 1450	<p>Session 7-A: <i>Intl. Conf. Room</i> <i>Session Chair:</i> TBA <i>Invited Talk 9: Optimization of Acoustic Emission Technique in Diagnosis of Knee Osteoarthritis - a Major Concentration in Damage Characterization and Source Localization</i> <i>Speaker:</i> Md Tawidul Islam Khan, Saga Univ.</p> <p><i>Invited Talk 10: Convolution Neural Network for Khmer Handwritten Text Recognition</i> <i>Speaker: Norliza Mohd Noor, SMIEEE, UTM Razak School of Engineering and Advanced Technology, Malaysia</i></p> <hr/> <p>Session 7-B: <i>At Room 22</i> <i>Session Chair:</i> TBA <i>Regular Session: IoT, Control and Automation III</i> <i>Paper ID: 140; 252; 278; 281; 282;</i></p> <hr/> <p>Session 7-C: <i>At Room 21CD</i> <i>Session Chair:</i> TBA <i>Regular Session: Traffic and Transport Technology</i> <i>Paper ID: 193; 198; 199; 223; 246; 258</i></p> <hr/> <p>Session 7-D: <i>At Room 21AB</i> <i>Session Chair:</i> TBA <i>Regular Session: Computer Networking</i> <i>Paper ID: 127; 138; 148; 181; 139; 231</i></p>
1450 ~ 1520	Coffee Break-2
1520~ 1650	<p>Session 8-A : <i>Intl. Conf. Room</i> <i>Session Chair:</i> TBA <i>Invited Talk 11: TITLE TBA</i> <i>Speaker:</i> A.K.M. Mahfuzul Islam, Institute of Industrial Science, The University of Tokyo. <i>Invited Talks 12: TITLE TBA</i> <i>Speaker:</i> Pavel Vlasanek, Institute for Research and Applications of Fuzzy Modeling, University of Ostrava, Czech Republic</p> <p><i>Invited Talk 13: <i>Imaging techniques in the field of fluid mechanics and applications</i></i> <i>Speaker: Naohisa Takagaki, School of Engineering, University of Hyogo, Japan</i></p> <hr/> <p>Session 8-B: <i>At Room 22</i> <i>Session Chair: Masakazu Morimoto</i> <i>Special Session (SS6) Advanced Image Recognition and its Application</i> <i>Paper ID: 197, 200; 216; 228; 230; 245</i></p> <hr/> <p>Session 8-C: <i>At Room 21CD</i> <i>Session Chair:</i> TBA <i>Regular Session: Pattern Recognition and Machine Learning II</i> <i>Paper ID: 48; 191; 179; 196; 270; 271</i></p>

	<hr/> Session 8-D: <i>At Room 21AB</i> Session Chair: TBA Regular Session: Health and Medical Application Paper ID: 16; 44; 154; 219; 243; 268;
1650 ~ 1730	Keynote Session-5: <i>Intl. Conf. Room</i> Session Chair: Md Atiqur Rahman Ahad Service Robotics and Automation Speaker: Toshio Fukuda, Fellow, IEEE; IEEE President-elect 2019 candidate Meijo University, Japan; Beijing Institute of Technology, China
1730 ~ 1800	Moving to Dinner Venue
1800 ~ 2030	Conference Dinner

28th June, 2018 (Thursday)

0800 ~ 0900	Breakfast-3
0900 ~ 1000	Session 9-A: <i>At Room 22</i> Session Chair: B M Mainul Hossain Special Session(SS10) Software Engineering for Quality Assurance II Paper ID: 46; 155; 190; 261; <hr/> Session 9-B: <i>At Room 21CD</i> Session Chair: TBA Regular Session: Electronics II Paper ID: 49; 51; 141; 263; <hr/> Session 9-B: <i>At Room 21CD</i> Session Chair: TBA Regular Session: Information Theory and Systems II Paper ID: 79; 120; 195; 237; <hr/> Session 9-C: <i>At Sub-foyer</i> Session Chair: TBA Poster Session: Student Paper Paper ID: 135; 175; 204; 208; 250; 277 Paper ID: 157; 236; 267; 279
1000 ~ 1020	Coffee Break-1
1020 ~ 1100	Keynote Session-6: <i>Intl. Conf. Room</i> Session Chair: TBA Addressing spectrum scarcity through hybrid optical and radio-frequency wireless networks Speaker: Mohamed-Slim Alouini, Fellow, IEEE

	King Abdullah University of Science and Technology, KSA
1100 ~ 1140	Keynote Session-7: Intl. Conf. Room <i>Session Chair: TBA</i> Object Segmentation and Its Visual Quality Assessment for Images Speaker: King Ngi Ngan, FIEEE, FIET, FIEAsut National Thousand Talents Program Chair Professor University of Science and Technology of China, China
1140 ~ 1210	Award Giving and Closing Ceremony
1210 ~ 1300	Lunch break
1300 ~ 1830	Tour - details will be added during the conference

Notes:

- **Presentation time of each paper is 15 min. The session time is allocated to each paper according to their order shown.**
- For Poster presentation recommended size is A0.
- This is a draft Program subject to further change. Kindly check your presentation time. Provide your feedback to maskamal@ieee.org;

Appendix I

PID	TITLE of the paper for Oral Presentation
4	Introducing ACO+ for Modeling Gene Regulatory Networks from Microarray Data
7	Lifting Scheme Based Bandelet Transform Improvements for Medical Video Coding
12	Human Upper Body Detection in Still Images Based on Extended PCA
13	Adversarial Network for edge detection
16	Hardware/Software Codesign for Portable Optical Coherence Tomography (OCT) Applications
21	Computation Reduction for Decoding-Assisted HEVC Inter Prediction
22	Damage Boundary Detection of Partially Scanned Models
23	Xth Person View Video for Observation from Diverse Perspectives
24	Design of A Video-Based Vehicle Speed Measurement System - An Uncertainty Approach

34	Demosaicking filter using modified color conversion matrix
35	Effects of Chewing Gum on Differential Components of Psychomotor Vigilance: Improved Sustained Attention with Prolonged Reaction Time
43	A Cluster Compositional Algorithm for Incorporation of Multiple Sets of Clusters of Identical Data
44	Effect of plantar flexion resistance of ankle-foot orthosis on tendon length during gait
45	Global Localization from a Single Image in Known Indoor Environments
46	Move Method Recommendation using Call Frequency of Methods and Attributes
48	A Novel Lossless Coding Technique for Image Compression
49	CZTS BASED THIN FILM SOLAR CELL: An Investigation into the Influence of Dark Current on Cell Performance
50	Chicken Meat Freshness Identification using Colors and Textures Feature
51	Neural Network Bayesian Regularization Backpropagation to Solve Inverse Kinematics on Planar Manipulator
52	Delta T Source Location in AE Signal Processing Technique
55	A Novel Framework for Portfolio Selection using two Nascent Parameters
58	Inference of Gene Regulatory Network with S-system and Artificial Bee Colony Algorithm
59	Efficient multi-cue predictive tracking of multiple similar interacting objects
63	A Method to Recognize Food using Gist and SURF Features
66	Objective Functions in Fuzzy Cognitive Maps: the Case of Time Series Modeling
70	Automated Aeroponics System for Indoor Farming using Arduino
72	Implementation and Feasibility Analysis of GSM Based Smart Energy Meter for Digitalized Power Consumption with Advanced Features

77	Aspect-based Query Expansion for Search Results Diversification
79	Modeling Irrational Consumer Behaviors with Cognitive Maps. An Outline of a Framework.
115	Color Image Enhancement Using Luminance Histogram Equalization and Two-Factor Saturation Control
120	A Nutrient Content Estimation Estimation System of Buffet Menu using RGB-D Sensor
121	Design of the Lorentz Force Based Resonant Magnetic Sensor for SiGe MEMS on CMOS Process
123	Companion Following Robotic Wheelchair with Bus Boarding Capabilities
124	Automatic Text Summarization using Fuzzy C-Means Clustering
127	Enhanced Energy Detection using Matched Filter for Spectrum Sensing in Cognitive Radio Networks
133	Crack Propagation Analysis in Ductile Cast Iron by Acoustic Emission Technique
136	Mouse Anatomical Cardinal Planes and Axes Towards Augmentation for Behavior Analysis
138	Channel Assignment Augmentation Algorithm to Mitigate Interference for Heterogeneous "TV White Space" Users
139	A Minimum Spanning Tree Based Routing Protocol For Multi-hop And Multi-channel Cognitive Radio
140	A Portable Braille Refreshable Display Using Micro Servos
141	Optimization of growth procedure for silicon oxinitride (Si ₄ O ₅ N ₃) single-layer on SiC(0001)
142	Ovarian Follicle Classification using Numerical and B-mode Image Features from Ultrasound Scanning Devices
144	An Overview of FHSI: Fuzzy Color Space for Image Retrieval and Modeling Aesthetic Perceptions

145	Implementation of Fuzzy Logic in Autonomous Irrigation System for Efficient Use of Water
148	A New Version of Kerberos Authentication Protocol Using ECC and Threshold Cryptography for Cloud Security
151	Optimization of Absorption in Patterned 2D Transition Metal Dichalcogenides
153	Recognition and Solution for Handwritten Equation Using Convolutional Neural Network
154	Early detection of Parkinson's disease using image processing and artificial neural network
155	Aspect Extraction from Bangla Reviews using Convolutional Neural Network
156	IOT based Autonomous Class Attendance System using Non-Biometric Identification
160	Faster Image Compression Technique Based on LZW Algorithm Using GPU Parallel Processing
161	Fault Tolerant Control for Networked Control Systems with Sensor Faults
163	Blind Watermarking for 3-D Printed Objects using Surface Norm Distribution
168	A Machine Learning Approach on Classifying Orthopedic Patients Based on Their Biomechanical Features
169	Photonic Crystal based Liquid Sensor: A Theoretical Analysis for Formalin Detection
178	Human Identification Using WIFI Signal
179	Fake News Pattern Recognition using Linguistic Analysis.
181	An Effective Infrastructure for Pocket Switch Network
190	Security and Performance Bug Reports Identification with Class-Imbalance Sampling and Feature Selection
191	Embedded System based Bangla Intelligent Social Virtual Robot with Sentiment Analysis

193	Traffic Analysis Using Decentralized Social Internet Of Things
194	Learning Dictionary for Higher Secondary School Textbook in Bangladesh
195	Virtual Realty Implementation of Steering Hands Motion in Driving Simulator with Unity Technology
196	Fuzzy transform and support vector machine for pedestrian detection
197	Texture-suppressed Visual Attention Model for Grain Insects Detection
198	Real Time Traffic Density Measurement using Computer Vision and Dynamic Traffic Control
199	A Traffic Congestion Forecasting Model using CMTF and Machine Learning
200	Low Latency Image Processing of Transportation System Using Parallel Processing co-incident Multithreading (PPcM)
201	Bengali Sign Language Recognition Using Deep Convolutional Neural Network
205	IoT Enabled Smart Bicycle Safety System
214	An Efficient Way to Represent Braille using YOLO Algorithm
216	A Convolutional Autoencoder for Detecting Tumors in Double Contrast X-ray Images
218	Artificial Neural Network Architecture Design for EEG Time Series Simulation Using Chaotic System
219	Automated tracking and change detection for Age-related Macular Degeneration Progression using retinal fundus imaging
222	Development of an Autonomous Cupcake Machine
223	Parking Gate Control Based on Mobile Application
227	Character Recognition in Japanese Historical Documents via Adaptive Multi-Region Mode

228	Deep Neural Networks with Mixture of Experts Layers for Complex Event Recognition from Images
230	Appearance inspection of wire harness using RGB-D Sensor
231	Efficient Noise Aware Level Based Routing Protocol for Under Water Sensor Network (UWSNs)
232	Deep Metric Learning with Online Hard and Soft Selection for Person Re-identification
233	Feature Selection using Singular Value Decomposition for Stop Consonant Classification
235	Clothing Extremity Identification Using Convolutional Neural Network Regressor
237	Glioma Subtypes Clustering Method using Histopathological Image Analysis
238	A Regression based analysis of the effect of climate change on the production of major crops in Bangladesh
239	Frontal Gait Recognition from Incomplete RGB-D Streams Using Gait Cycle Analysis
240	Development of Two Wireless ECG Monitoring Systems and their Performance Assessment
243	Detection of Hard Exudates in Retinal Fundus Images Using Deep Learning
245	Real-time Surgical Tools Recognition in Total Knee Arthroplasty Using Deep Neural Networks
246	Eco-driving on Hilly Roads Using Model Predictive Control
251	Evaluating the Effectiveness of Conventional Machine Learning Techniques for Defect Prediction: A Comparative Study
252	Real-life Implementation of Internet of Robotic Things Using 5 DoF Heterogeneous Robotic Arm
253	Sentiment Analysis Using R: An Approach to Correlate Cryptocurrency Price Fluctuations with Change in User Sentiment Using Machine Learning

254	Mechanical Property Prediction Method Based on Multi-material 3D Printer
255	Inferring Bug Patterns for Detecting Bugs in JavaScript By Analyzing Abstract Syntax Tree
256	Coverage Control of a Mobile Multi-Agent Serving System in Dynamical Environment
258	Understanding Real Time Traffic Characteristics of Urban Zones Using GPS Data: A Computational Study on Dhaka City
261	Bug Severity Classification Based on Class-Membership Information
262	Path Hole Detection to Assist the Visually Impaired People in Navigation
263	Soft Error Tolerance in Memory Applications
265	A hybrid model in transfer learning based pre-trained model and a scale factor updating
268	Implanted Knee Kinematic Prediction: Comparative performance analysis of Machine learning techniques
270	Mobilephone Sensor-based Real-Time Human Activity Recognition Using One-Vs-Rest SVM
271	A Study on Sensor-based Activity Recognition Having Missing Data.
274	F-transform in image inpainting applications
278	DU-MD: An Open-Source Human Action Dataset for Ubiquitous Wearable Sensors
281	A Study on DSR Routing Protocol in Adhoc Network for Daily Activities of Elderly Living
282	A Modern, IoT Platform for Medical Engineering: Vein Visualization
285	A Fog Computing-based Method to Information and Control System Reliability Enhancement
286	Oil Fields Monitoring by Groups of Mobile Micro-robots Using Distributed Neural Networks

287	A Failure Prediction Method for Oil Field Complex Technical Objects
290	