

# SoICT 2018 TECHNICAL PROGRAM

**Thursday, 6th December 2018**

8:00	<b>REGISTRATION</b> Venue: Lotus Room	
8:30	<b>CONFERENCE OPENING</b> Venue: Lotus Room	
8:50	<b>KEYNOTE I - Lotus Room</b> Chair: Marc Bui - Laboratoire CHArt, EPHE - Sorbonne, France <i>Invited speaker: Prof. Marimuthu Palaniswami (The University of Melbourne, Australia)</i> <b>Internet of Things Revolution: Can Predictive Analytics Create Sustainable and Fair Smart Cities</b>	
9:35	<b>KEYNOTE II - Lotus Room</b> Chair: Toulouse Michel - Vietnam German University, Vietnam <i>Invited speaker: Prof. Xin Yao (Southern University of Science and Technology, China)</i> <b>Three Major Approaches to Tackling Many Objectives</b>	
10:20	<b>GROUP PHOTO</b>	
10:25	<b>COFFEE BREAK</b>	
10:35	<b>Session 3B - Lotus 1</b> <b>Image Processing and Computer Vision</b> Chair: Marimuthu Palaniswami - The University of Melbourne, Australia	<b>Session 3A - Lotus 2</b> <b>Data Analytics I</b> Chair: Tu-Bao Ho - Japan Advanced Institute of Science and Technology, Japan
10:35	<i>Ryo Nishide, Ayumi Yamashita, Yumi Takaki, Chikara Ohta, Kenji Oyama and Takenao Ohkawa</i> <b>Calf Robust Weight Estimation Using 3D Contiguous Cylindrical Model and Directional Orientation from Stereo Images</b>	<i>H. K. Dai</i> <b>Episode-Rule Mining with Minimal Occurrences via First Local Maximization in Confidence</b>
10:55	<i>Shunta Fukumoto, Ryo Nishide, Yumi Takaki, Chikara Ohta, Kenji Oyama and Takenao Ohkawa</i> <b>Quantifying the Approaching Behaviors for Interactions in Detecting Estrus of Breeding Cattle</b>	Hussein Hazimeh, Elena Mugellini, Simon Ruffieux, Omar Abou Khaled and Philippe Cudré-Mauroux <b>Automatic Embedding of Social Network Profile Links into Knowledge Graphs</b>
11:15	<i>Yohei Yamauchi, Ryo Nishide, Yumi Takaki, Chikara Ohta, Kenji Oyama and Takenao Ohkawa</i> <b>Cattle Community Extraction Using the Interactions Based on Synchronous Behavior</b>	<i>Dang Hoang Long, Minh-Tien Nguyen, Ngo Xuan Bach, Le-Minh Nguyen and Tu Minh Phuong</i> <b>An Entailment-based Scoring Method for Content Selection in Document Summarization</b>
11:35	<i>Tien Thanh Le, Rin Nishikawa, Masashi Takemoto, Thi Thanh Binh Huynh and Hironori Nakajo</i> <b>Cow estrus detection via Discrete Wavelet Transformation and Unsupervised Clustering</b>	<i>Tung Nguyen Trong, Dieu Vu Hoang, Khoat Than and Linh Ngo Van</i> <b>Reducing class overlapping in supervised dimension reduction</b>
11:55	<b>LUNCH</b> <b>Epice Restaurant</b>	
13:15	<b>KEYNOTE III - Lotus</b> Chair: Marimuthu Palaniswami - The University of Melbourne, Australia <i>Invited speaker: Prof. Kurt Geihs (Universitaet Kassel, Germany)</i> <b>Teamwork in Multi-Robot Systems</b>	
14:00	<b>Industrial Talks - Lotus</b> Chair: Nguyen Xuan Hoai - AI Academy Vietnam, Vietnam	
14:00	<i>Invited speaker: Van Hai Do (VTCC, Vietnam)</i> <b>Speech Processing in Viettel Cyberspace Center</b>	
14:20	<i>Invited speaker: Anh Hoang Tuan (VCCorp, Vietnam)</i> <b>BigData insights, Machine learning and AI in VCCORP</b>	
14:40	<b>COFFEE BREAK</b>	
15:35	<b>Session 6A - Lotus 1</b> <b>Deep Learning for Computer Vision I</b> Chair: Yasushi Yagi - Osaka University, Japan	<b>Session 6B - Lotus 2</b> <b>Data Analytics II</b> Chair: Tu-Bao Ho - Japan Advanced Institute of Science and Technology, Japan
14:55	<i>Nhung Nguyen, Stuart Perry, Ha Le Thanh and Thuy Nguyen Thi</i> <b>Pavement crack detection using convolutional neural network</b>	<i>Elaine Zauneder, Larissa Müller and Sven Blankenburg</i> <b>High Accuracy Forecasting with Limited Input Data: Using FFNNs to Predict Offshore Wind Power Generation</b>
15:15	<i>Dinh Quoc Trung Dang, Vu Gia Hy Che and Ba Tien Dinh</i> <b>Efficient vehicle detector in traffic surveillance systems</b>	<i>Tung Le and Nguyen Le Minh</i> <b>Combined Objective Function in Deep Learning Model for Abstractive Summarization</b>
15:35	<i>Sang Dinh Viet and Minh Nguyen Duc</i> <b>Fully Residual Convolutional Neural Networks for Aerial Image Segmentation</b>	<i>Chau Vo, Dung Duong, Duy Nguyen and Tru Cao</i> <b>From Helpfulness Prediction to Helpful Review Retrieval for Online Product Reviews</b>
15:55	<i>Tuan-Anh Le D., Phong Vo, Atsuo Yoshitaka, Duc-Tan Lam and Hoai-Bac Le</i> <b>Recover Water Bodies in Multi-spectral Satellite Images with Deep Neural Nets</b>	<i>Chau Pham Minh, Duc Bui Minh and Anh Duong Tuan</i> <b>Discord Discovery in Streaming Time Series based on an Improved HOT SAX Algorithm</b>
16:15	<b>COFFEE BREAK</b>	
16:30	<b>Session 7A - Lotus 1</b> <b>Deep Learning for Computer Vision II</b> Chair: Nguyen Thi Thuy - VNUA, Vietnam	<b>Session 7B - Lotus 2</b> <b>Data Analytics III</b> Chair: Nguyen Thanh Thuy, VNU, Vietnam

16:30	<i>Thoi Hoang Dinh, Toan Pham Van, Thanh Ta Minh, Hau Nguyen Thanh and Anh Pham Hoang</i> <b>Large Scale Fashion Search System with Deep Learning and Quantization Indexing</b>	<i>Thuc Nguyen Trac and Phuc Do</i> <b>CitationLDA++: an extension of LDA for discovering topics in document network</b>
16:50	<i>Sang Dinh and Dung Hoang Trung</i> <b>Two-stream Deep Residual Learning with Fisher Criterion for Human Action Recognition</b>	<i>Phuoc-Hai Huynh, Van Hoa Nguyen and Thanh-Nghi Do</i> <b>Random ensemble oblique decision stumps for classifying gene expression data</b>
17:10	<i>Phuc Thinh Do and Ngoc Quoc Ly</i> <b>A New Framework For Crowded Scene Counting Based On Weighted Sum Of Regressors and Human Classifier</b>	<i>Tat-Huy Tran, Tuan-Dung Cao and Thanh-Thuy Luu</i> <b>Hot Topic Detection on Newspaper</b>

## Friday, 7th December 2018

8:00	<b>REGISTRATION</b> Venue: Lotus		
8:30	<b>KEYNOTE IV - Lotus</b> Chair: Biplad Sikdar - NUS, Singapore <i>Invited speaker: Prof. Shui Yu (Deakin University, Australia)</i> <b>Networking and Big Data: Challenges and Opportunities</b>		
9:15	<b>COFFEE BREAK</b>		
9:25	<b>Session 9A - Lotus 1</b> <b>IoT and Blockchain</b>	<b>Session 9B - Lotus 2</b> <b>Software Engineering I</b>	
	Chair: Shui Yu - University of Technology, Sydney, Australia	Chair: Mikio Aoyama - Nanzan University, Japan	
9:25	<i>Kimheng Sok</i> <b>Blockchain and Internet of Things Opportunities and Challenges</b>	<i>Viet-Khoa Vo-Ho, Quoc-An Luong, Duy-Tam Nguyen, Mai-Khiem Tran and Minh-Triet Tran</i> <b>Personal Diary Generation from Wearable Cameras with Concept-Augmented Image Captioning and Wide Trail Strategy</b>	
9:45	<i>The Duy Phan, Thi Thu Hien Do, Hoang Hien Do and Van-Hau Pham</i> <b>A survey on opportunities and challenges of Blockchain technology adoption for revolutionary innovation</b>	<i>Yuya Ieiri, Reiko Hishiyama and Yuu Nakajima</i> <b>Walk Rally Application for Revitalizing Shopping Areas</b>	
10:05	<i>Nhan Ly-Trong, Chuong Dang-Le-Bao, Dang Huynh-Van and Quan Le-Trung</i> <b>UiTiOt v3: A Hybrid Testbed for Evaluation of Large-Scale IoT Networks</b>	<i>Huu Tam Tran, Alexander Jahl, Ramaprasad Kupplli, Kurt Geihs, Xuan Thang Nguyen and Thi Thanh Binh Huynh</i> <b>DECOM: A framework to support evolution of IoT services</b>	
10:25	<b>COFFEE BREAK</b>		
10:35	<b>Session 10A - Lotus 1</b> <b>Algorithms</b>	<b>Session 10B - Lotus 2</b> <b>Software Engineering II</b>	
	Chair: Marc Bui - Laboratoire CHArt, EPHE - Sorbonne, France	Chair: Minh-Triet Tran - Ho Chi Minh University of Science, Vietnam	
10:35	<i>Anh Tu Phan, Tuan Dat Nguyen and Quang Dung Pham</i> <b>Traveling Salesman Problem with Multiple Drones</b>	<i>Thuy Hoang Van, Anh Phan Viet and Hoai Nguyen Xuan</i> <b>Automated Large Program Repair based on Big Code</b>	
10:55	<i>Viet-Dung Nguyen, Ba-Thai Pham, Viet-Hung Tran and Phan-Thuan Do</i> <b>A dynamic programming algorithm for the maximum induced matching problem in permutation graphs</b>	<i>Thao Nguyen Van and Nugroho Fredivianus</i> <b>Formal Verification of ALICA Multi-agent Plans using Model Checking</b>	
11:15	<i>Van Long Tran, Eric Renault, Huyen Do Xuan and Viet Hai Ha</i> <b>Implementation of OpenMP Data-Sharing on CAPE</b>	<i>Duong Tran Dinh, Hung Pham Ngoc and Tung Nguyen Duy</i> <b>A method for Automated User Interface Testing of Windows-based Applications</b>	
11:35	<b>ICT Solution for E-Governance</b>	<i>Ngoc-Tuan Nguyen, Quyet-Thang Huynh and Thi-Huong-Giang Vu</i> <b>A Bayesian Critical Path Method for Managing Common Risks in Software Project Scheduling</b>	
	<i>Duc-Hiep Nguyen, Dinh-Nghia Nguyen-Duc, Nguyen Huynh-Tuong and Hoang-Anh Pham</i> <b>CVSS: A Blockchainized Certificate Verifying Support System</b>		
11:45	<i>Hoang Dang Hai and Pham Thieu Nga</i> <b>Evaluating the security levels of the Web-Portals based on the standard ISO/IEC 15408</b>		
11:55	<b>LUNCH</b> <b>Epice Restaurant</b>		
13:15	<b>KEYNOTE V - Lotus</b> Chair: Toulouse Michel - Vietnam German University, Vietnam <i>Invited speaker: Dr. Thuy Duong Vu (Westerdijk Fungal Biodiversity Institute, Netherlands)</i> <b>Massive fungal biodiversity data re-annotation and visualization with multi-level clustering</b>		
14:00	<b>COFFEE BREAK</b>		
14:10	<b>Session 12A - Lotus 1</b> <b>Network Communication</b>	<b>Session 13 - Lotus 2</b> <b>ICT Solution for E-Governance I</b>	<b>Session 13 - Jasmine</b> <b>Short Presentations</b>
	Chair: Biplad Sikdar - NUS, Singapore	Chair: Ngoc-Hoa Nguyen - VNU, Vietnam	Chair: Nguyen Thanh Thuy - VNU, Vietnam
14:10	<i>Tomohiro Ono and Kiyoshi Ueda</i> <b>Data Redundancy Dynamic Control Method for High Availability Distributed Clusters</b>	<b>Keynote talk:</b> Chair: Dao Ngoc Chien - MOST, Vietnam <i>Invited speaker: Prof. Phung Van On (University of Transport Technology, Vietnam)</i> <b>A perspective of Vietnamese e-Governance in next years</b>	<b>Start from 14:55. Each presentation takes 5 minutes.</b> 1. Aspect Based Sentiment Analysis Using NeuroNER and Bidirectional Recurrent Neural Network 2. An Effective Ensemble Deep Learning Framework for Malware Detection 3. Vietnamese Speaker Authentication Using Deep Models 4. Development of a Vietnamese Large Vocabulary Continuous Speech Recognition System under Noisy Conditions
14:30	<i>Jisoo Lee, Syed Muhammad Raza, Rajesh Challa and Hyunseung Choo</i> <b>Design and Experimental Validation of SFC Monitoring Approach with Minimal Agent Deployment</b>	<i>Nguyen Viet Duc and Pham Thanh Giang</i> <b>NADM: Neural Network for Android Detection Malware</b>	

14:50	<i>Anh-Tu Tran, Minh-Tri Nguyen, Thanh-Dang Diep, Takuma Nakajima and Nam Thoai</i> <b>A Performance Study of Color-Based Caching in Telco-CDNs by Using Real Datasets</b>	<i>Xuan Dau Hoang</i> <b>A Website Defacement Detection Method Based on Machine Learning Techniques</b>	5. Fingerprint Recognition using Gabor wavelet in MapReduce and Spark 6. Refined Cattle Detection Using Composite Background Subtraction and Brightness Intensity from Bird's Eye Images 7. Prediction and Portfolio Optimization in Quantitative Trading Using Machine Learning Techniques 8. Intelligent Assistants in Higher-Education Environments: The FIT-EBot, a Chatbot for Administrative and Learning Support 9. Overall Structural System Solution For Supporting Services And Tourists Management Oriented On Smart City In Viet Nam 10. Migrating Vietnam Offshore into Agile 11. The Miniaturized IoT Electronic Nose Device and Sensor Data Collection System for Health Screening by Volatile Organic Compounds Detection from Exhaled Breath
15:10	<i>Hung Nguyen Ngoc and Kenji Nakagawa</i> <b>Online estimation for Packet Loss Probability of MMPP/D/1 queuing by Importance Sampling</b>	<i>Dyah Lestari Widaningrum, Isti Surjandari and Dodi Sudiana</i> <b>Spatial Decision Tree Analysis to Identify Location Pattern</b>	
15:30	<i>Kieu Minh Viet, Dai Tho Nguyen and Thanh Thuy Nguyen</i> <b>Techniques for improving performance of the CPR-based approach</b>	<i>Hieu Mac, Dung Truong, Lam Nguyen, Hoa Nguyen, Hai Anh Tran and Duc Tran</i> <b>Detecting Attacks on Web Applications using Autoencoder</b>	
15:50	<b>COFFEE BREAK</b>		
16:05	<b>Session 15B - Lotus 1 Computer Vision and Pattern Recognition</b>	<b>Session 15A - Lotus 2 ICT Solution for E-Governance II</b>	<b>Session 15C - Jasmine Computational Biology and Applied Soft Computing</b>
	Chair: Makoto Onizuka - Osaka University, Japan	Chair: Dao Ngoc Chien - MOST, Vietnam	Chair: Dang The Ngoc - PTIT, Vietnam
16:05	<i>Hai Vu, Van Ngoc Duong and Thi Thuy Nguyen</i> <b>Inspecting rice seed species purity on a large dataset using geometrical and morphological features</b>	<i>Nghia Duong T., Hieu Q. Dang, Manh Pham H., Cuong Hoang M. and Minh Nguyen D.</i> <b>1-1 Fingerprint Enrollment and Verification Using Two-Step Minuata-based matching algorithm</b>	<i>Thi Huong Chu, Quang Uy Nguyen, Xuan Hoai Nguyen and Van Loi Cao</i> <b>Semantics Based Substituting Technique for Reducing Code Bloat in Genetic Programming</b>
16:25	<i>Lam Tran and Deok-Jai Choi</i> <b>A Binarization Method for Extracting High Entropy String in Gait Biometric Cryptosystem</b>	<i>Phuong Hanh Du, Hai Chau Nguyen, Kim Khoa Nguyen and Ngoc Hoa Nguyen</i> <b>An Efficient Parallel Algorithm for Computing the Closeness Centrality in Social Networks</b>	<i>Tran The Anh, Huynh Thi Thanh Binh, Do Bao Son, Pham Anh Duc and Nguyen Binh Minh</i> <b>An Evolutionary Algorithm for Solving Task Scheduling Problem in Cloud-Fog Computing Environment</b>
16:45	<i>Nuntiya Chiensriwimol, Pornchai Mongkolnam and Jonathan H. Chan</i> <b>Frozen Shoulder Rehabilitation: Exercise Simulation and Usability Study</b>		<i>Nguyen Thi Thu Giang and Le Duc Hau</i> <b>A matrix completion method for drug response prediction in personalized medicine</b>
17:05	<i>Nha Pham Van, Ngo Thanh Long, Pham The Long and Pham Van Hai</i> <b>A new assessment of cluster tendency ensemble approach for data clustering</b>		
18:30	<b>GALA DINER</b> <b>Venue: 4U (For You) Restaurant</b> <b>Lot 1+2+3, Vo Nguyen Giap Street, Da Nang</b> <b>Bus Pick-up from Pullman hotel at 18h00</b>		

### HOTLINES:

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