

# PROGRAM SCHEDULE FOR WORLD IT CONGRESS 2018

Day 1, Feb. 20, 2018				
Time	Min	HALL -A	HALL B	HALL C
10:00-12:00	120	<b>Session A-0</b> <b>ANMT 2018 (Closed Workshop)</b> Chair : JoonMin Gil		
13:00-15:00	120	Organizing Committee Meeting (Only for Invited Members)		
16:00-17:30	90	Local Arrangement Committee Meeting (Only for Invited Members)		

Day 2, Feb. 21, 2018				
Time	Min	HALL -A		
08:40-09:00	20	<b>Registration</b>		
09:00-10:30	90	<b>Session A-1</b> Chair : R. Young Chul Kim	<b>Session B-1</b> Chair : Jin Wang	<b>Session C-1</b> Chair : Jun-Ho Huh
10:30-10:40	10	<b>Coffee Break</b>		
10:40-12:00	80	<b>Session A-2</b> Chair : Soohyun Cho	<b>Session B-2</b> Chair : Kyung-Soo Lim	<b>Session C-2</b> Chair : Jin Wang
12:00-13:10	70	<b>Lunch</b>		
13:10-14:00	50	<b>Keynote I: Internet of Battlefield Things: Challenges and Research Opportunities</b> Kim-Kwang Raymond Choo, Ph.D. Professor at the University of Texas at San Antonio, USA Chair: Kyung-Soo Lim		
14:00-14:10	10	<b>Coffee Break</b>		
14:10-15:30	80	<b>Session A-3</b> Chair : Ganjar Alfian	<b>Session B-3</b> Chair : Kyung-Soo Lim	<b>Session C-3</b> <b>HRH 2018 (Closed Workshop)</b> Chair : Jun-Ho Huh
15:30-15:40	10	<b>Coffee Break</b>		

15:40-17:00	80	<b>Session A-4</b> Chair : Sangkee Suk	<b>Session B-4</b> <b>VASSI 2018</b> (Closed Workshop) Chair : Hwankuk Kim	<b>Session C-4</b> <b>ISWP 2018</b> (Closed Workshop) Chair : Yunsick Sung
18:00		<b>Keynote II: Intelligent Decision Computing Paradigms in Sustainable Computing</b> Arun Kumar Sangaiah, Ph.D. VIT University, Vellore, India Chair: Kyung-Soo Lim  <b>Banquet (HALL B)</b>		

Day 3, Feb. 22, 2018		
Time	Min	HALL -A
10:00-12:00	120	<b>Session A-5</b> <b>IWIoE 2018 (Closed Workshop)</b> Chair : Daewon Lee
13:00-15:00	120	Executive Meeting - Organized by World IT 2017 (Only for Invited Members)
16:00-17:30	90	Organizing Committee Meeting II (Only for Invited Members)

1. A paper presentation should be made by one of authors of the paper for 20 minute. (10 minutes for the presentation itself and 5 minutes for Q/A)
2. All speakers of each session should meet the session chair at their room 10 minutes before the session begins.
3. Windows 7 laptops running the Adobe Reader and Microsoft Office for paper presentations will be prepared. Please prepare for your presentation.

**DETAILED SCHEDULE FOR  
THE 2018 WORLD CONGRESS ON  
INFORMATION TECHNOLOGY, APPLICATIONS  
AND SERVICES**

**(WORLD IT CONGRESS 2018)**

**Day 1, Feb. 20, 2018 (Tuesday)**

**10:00-12:00      Session A-0 ANMT 2018 (Closed Workshop)**  
**(HALL A)**  
**(Chair: JoonMin Gil)**

- 1. Application of Weighted Bayesian Algorithm in Spam Messages Detection**  
*Quanzhu Yao, Huimin Fan, Rong Fei, Zan Bai, Jin Wang, Yuhui Zheng*
- 2. End to End Performance Maximization through Data Transfer Node in a High-speed Network**  
*Jongseon Park, Jinhyung Park, Seunghae Kim, Minki Noh*
- 3. How to detect and respond to the malicious website modified by a drive-by download attack**  
*Seung-Yup Jun, Young-Ho Shin, Hyuk-ro Lee*
- 4. IT Security compliance issues in public sector and response plans**  
*Gwang-il Ju, Jinhyung Park, Wanyoung Heo, Hark-Soo Park*
- 5. An Intelligent Residual Resource Monitoring Scheme in Cloud Computing Environments**  
*JongBeom Lim, HeonChang Yu, Joon-Min Gil*
- 6. Accelerated Bulk Memory Operations on Heterogeneous Multi-Core Systems**  
*JongHyuk Lee, Weidong Shi, JoonMin Gil*
- 7. Automatic Enhancement of Spatial Resolution to Local Area for Satellite Imagery Using Projection Transform**  
*Jea hee kim, Wanyoung Heo, Jinhyung Park*

**13:00-15:00      Organizing Committee Meeting I**

**16:00-17:30      Local Arrangement Committee Meeting**

**Day 2, Feb. 21, 2018 (Wednesday)**

**08:40-09:00 Registration**

**09:00-10:30 Session A-1 World-IT 2018**

**(HALL A)**

**(Chair: R. Young Chul Kim)**

- 1. Recovery Techniques for Bigdata in Distributed File Systems**  
*Dong-Jin Shin, Ho-geun Lee, Jong-min Eun Sung-Hoon Cho, Jeong-Joon Kim*
- 2. Visualizing Reusable Code patterns based on Object-Oriented Reusability Metrics**  
*Eun Young Byun, R. Young Chul Kim*
- 3. An Estrus Detection Method based on Impulse and Fingerprint Indoor Location Information**  
*Jemin Song, Bong-Ki Son, Keun Ho Ryu*
- 4. A novel Digital Auscultation Method using a Skin Image**  
*Sang-Il Jo, Kwang-Seok Hong*
- 5. Timeliness Guarantee Method of Electronic Record Based on Digital Continuity**  
*Yongjun Ren, Yuyi Huo, Xiaohua Wang, Jin Wang*
- 6. Design of Blockchain-Based Decentralized Integrity Preservation In Digital Investigation**  
*Jung Hyun Ryu, Jong Hyuk Park*
- 7. An Application Case of Process Asset Library (PAL) for Small & Medium Sized Software Companies**  
*So Young Moon, Bo Kyung Park, Woo Sung Jang, R. Young Chul Kim*

**09:00-10:30 Session B-1 World-IT 2018**

**(HALL B)**

**(Chair: Jin Wang)**

- 1. A Performance Model for CAN over Noisy Channels**  
*JinYeong Um, Jongsuk Ahn*
- 2. Design of mutual authentication protocol among NFC devices using NDEF digital signature**  
*Seung-Su Yang, Seung-Ho Han, Hyung-Joon Kim, Seok-Cheon Park*
- 3. A Relay-Selection Technique Based on Near Future Location to Solve Broadcast Storm Problem in Vehicle Ad-hoc Networks**  
*Tae-Hwan Choi, Jong-Suk Ahn, Jin-Yeong Um*
- 4. One Lightweight Security Authentication Protocol Based on Static ID Mechanism**  
*Ying Zheng, Longhai Jin, Yu Jiang, Hongtao Bai, Lili He*
- 5. A Link Prediction Algorithm Based on Information Propagation in Uncertain Protein-protein Interaction Network**  
*Wei Liu, Liangyu Ma, Ling Chen, Jin Wang, Yili Wang*
- 6. KEPKO Energy IoT Service Solution: Real-time Radiometric Thermal Data Analysis Using Machine Learning Algorithms**  
*Aaron Nichie, Sukyung Kang, Younghyun Kim, Myung-hye Park, Honggeun Kim*
- 7. Eye-tracking and SNS Analysis-based User Modeling for Recommendation Reflecting Personal Preference**  
*Hyejin Song, Namme Moon*

**09:00-10: 30      Session C-1 World-IT 2018**

**(HALL C)**

**(Chair: Jun-Ho Huh)**

- 1. Differential Privacy Protection Based on Sensitivity Control**  
*Chunyong Yin, Yuhang Zhu, Jin Wang, Suk-min Kang, Jeong-Uk Kim*
- 2. SMS-based Data base Security System for smart hospital**  
*Byung Wook Kwon, Jong Hyuk Park*
- 3. A Cost optimization scheme using advanced attack graph for efficient security risk mitigation**  
*Jun Young Park, Eui-Nam Huh*
- 4. A Study on Malicious Code Similarity Analysis Using API Call Sequence**  
*Kangsik Shin, Yoojae Won*
- 5. Personalized ( $\alpha$ , l)-Anonymity Method Based on Granularity Division**  
*Chunyong Yin, Shilei Ding, Jin Wang*
- 6. Improved Deep Packet Inspection Technology in Data Stream Detection**  
*Chunyong Yin, Hongyi Wang, Jin Wang, Suk-min Kang, Jeong-Uk Kim*
- 7. Code-based Preservation Mechanism of Electronic Record in Electronic Record Center of Cloud Storage**  
*Yongjun Ren, Zixuan Shen, Yaping Cheng, Jin Wang*

**10:30-10:40      Coffee break**

**10:40-12:00      Session A-2 World-IT 2018**

**(HALL A)**

**(Chair: Soohyun Cho)**

- 1. Based on priority data with Adaptive IFS Channel Hopping in IoT Environment**  
*Gayoung Kim, Min-Su Seok, Jin-Yeong Um*
- 2. Design of Improved Data Quality Management System for Providing Reliable Data**  
*Min-Hyung Park, Hyung-Joon Kim, Seung-Ho Han, Seok-Cheon Park*
- 3. Incentive Mechanism of Data Storage for Wireless Sensor Network**  
*Yongjun Ren, Sai Ji, Jin Wang, Suk-min Kang, Jeong-Uk Kim*
- 4. Design of Movie Information Service System Based on Augmented Reality**  
*Seung-Ho Han, Seung-su Yang, Hyung-Joon Kim, Seok-Cheon Park*
- 5. A Method to Identify the High Significance Input Factors in Strawberry Growth and Production**  
*Vasanth Ragu, Myeongbae Lee, Salman Rahman, Jangwoo Park, Yongyun Cho, Changsun Shin*
- 6. An Application of linear regression and Correlation for the prediction of Strawberry Growth**  
*Venkatesan Saravana Kumar, Saraswathi Sivamani, Myeongbae Lee, JangWoo Park, Changsun Shin, Yongyun Cho*
- 7. Multithreaded Execution Method on Non-Volatile Memory File System for Object Storage and Cloud/Data-center Storages**  
*Jung-Geun Kim, Sang-Jae Nam, Su-Kyung Yoon, Shin-Dug Kim*

**10:40-12:00      Session B-2 World-IT 2018**

**(HALL B)**

**(Chair: Kyung-Soo Lim)**

- 1. 2-Hop Label Size Reduction for Directed Acyclic Graph**  
*Jinhyun Ahn, Dong-Hyuk Im*
- 2. Analyzing Big Data Issues in IIoT Environment Using Topic Modeling**  
*Ji Yeon Cho, Hye Sun Lee, Bong Gyou Lee*
- 3. A Signal CFAR Detection Algorithm Based on Generalized S Transform**  
*Wang Jie, Lin Yun, Yu Xiaowan*
- 4. Fuzzy Rule Mining by Clustering Approach to Estimate the Difficulty of Programming Problems**  
*Chowdhury Md Intisar, Yutaka Watanobe*
- 5. Motion Adaptive Recursive Denoising Filter for Low-dose X-ray Fluoroscopy**  
*Sang Wook Park, Hui Jin Joo, Sung Suk Oh, Jeongwoo Sohn, Soowon Seo*
- 6. Textile Fabric Defect Detection Via Sparse Subspace Clustering**  
*Peng Li, Junli Liang, Minghua Zhao, Xubang Shen, Jin Wang*
- 7. Personalized Diet Recommendation Algorithm Based on Probabilistic Matrix Factorization with Adaboost for Diabetes**  
*Hongtao Bai, Xuan Li, Jin Wang, Ming-hao Zhao, Lili He, Yu Jiang*
- 8. A Novel Feature Clustering and Weighting for Sentiment Estimation**  
*Yili Wang, Jin Wang, Hee Yong Youn*

**10:40-12:00      Session C-2 World-IT 2018**

**(HALL C)**

**(Chair: Jin Wang)**

- 1. A workqueue based interrupt handling mechanism for improving delay time of a real-time operating system**  
*Tae-eun Yoon, Jeaho Hwang*
- 2. Design and Implementation of Smart-Mirror supporting Apparel Image Collection Function and Costume Matching Recommendation Service**  
*Hyeon-woo An, Jae-hyeon Cho, Ki-hoon Lee, Nammee Moon*
- 3. Design and Implementation of Board Management Controller for High Performance Computing**  
*Cheol Shim, Min Choi*
- 4. Cognitive Model for Sentimental Service Based on Multi-Modal Sensing**  
*Svetlana Kim, YongIk Yoon*
- 5. A Secure and Efficient KSI System based on Threshold-Signature for Electronic Document Protection**  
*Gyeong-Jin Ra, Im-Yeong Lee*
- 6. Parallel Hybrid Algorithms for Tridiagonal Equations on a GPU**  
*Xuan Li, Longhai Jin, Ximing Li, Yu Jiang, Hongtao Bai*
- 7. Improved Superpixel based Graph Kernel Method for Hyperspectral Classification**  
*Chenyang Ma, Yunjie Chen, Yili Wang, Le Sun*
- 8. Plan Recognition Method based on Intuitionistic Fuzzy Theory and Event-Driven**

*Xiaofan Wang, Lei Wang, Yuhui Zheng, Jin Wang*

**12:00-13:10 Lunch break**

**13:10-14:00 Keynote Speech I**

**(HALL A)**

**(Chair: Kyung-Soo Lim)**

**“Internet of Battlefield Things: Challenges and Research Opportunities”**

*Kim-Kwang Raymond Choo, Ph.D.*

*The University of Texas at San Antonio, USA*

**14:00-14:10 Coffee break**

**14:10-15:30 Session A-3 World-IT 2018**

**(HALL A)**

**(Chair: Ganjar Alfian)**

- 1. Balancing Between Replication and Deduplication for Flash Storage Systems**  
*Seung-Ho Lim*
- 2. A Study on the Data Analysis of Environmental Sensors Using Machine Learning Algorithms**  
*Kyong-Hee Lee, Hui Kim, Do-Hyun Kim*
- 3. A Low Cost IoT-based Traceability System for Perishable Food Supply Chain**  
*Ganjar Alfian, Muhammad Fazal Ijaz, Muhammad Syafrudin, Jaeho Lee, Jongtae Rhee*
- 4. An Internet of Things System Architecture for Aiding Firefighters in the Scene of Disaster**  
*Hyesun Lee, Sang Gi Hong, Myungnam Bae, Kyo-Hoon Son, Mingi Jeong, Kang Bok Lee*
- 5. A New Anomaly Detection Method of Spectrum Based on Deep Neural Networks**  
*Q. S. Feng, Y. B. Zhang, Z. Dou, Y. Lin, J. Wang*
- 6. Personalized Journalism Platform Model based on Distributed System**  
*ByeoWool Kim and YongIk Yoon*

**14:10-15:30 Session B-3 World-IT 2018**

**(HALL B)**

**(Chair: Kyung-Soo Lim)**

- 1. A Study of Nuclear cyber security regulation guideline inspection automation and information providing list derivation using ICT vulnerability check tool**  
*Jae-hong Kim, Yang-seo Choi, Jung-chan Na*
- 2. Consensus Building Algorithm with BFT for Permissioned Blockchain**  
*Takumi Yamashita, Yutaka Watanobe*
- 3. Blockchain-based Multiple AAA System in Edge Computing for IoT Networks**  
*N. Y. Kim, S.K. Suk, J. H. Park*
- 4. Detection scheme of man-in-the-middle attack on smart devices**  
*Seung-Hak Kim, Sang-Jun Yoon, Bo-Geun Jang, Ki-Hyun Jung*



**5. Design of a De-identification Framework for Utilizing Various Clinical Research Data in a General Hospital**

*Jae Dong Lee, Jipmin Jung, Phillip Park, Ki Chung Ryu, Seunghyun Chung, Hyosoung Cha*

**6. Undetectable malicious attack using scheduler freezing in operating system**

*Soung-Ho Choi, Kyeong-Joo Jung, Ki-Hyun Jung*

**14:10-15:30      Session C-3 HRH 2018 (Closed Workshop)**

**(HALL C)**

**(Chair: Jun-Ho Huh)**

**1. Case Studies on the Measures on Efficient Processes in Overseas Procurement of Military Supplies**

*YK Jung, Jun-Ho Huh*

**2. Study on Policing for Open Innovation in Defense Science and Technology: Focused on the government-funded research institutions**

*YK Jung, Jun-Ho Huh*

**3. A Study on the effects of Code Review on Software Quality based on an environmental Case Study of Google and Samsung Electronics' Code Review**

*Wonseop Lee, Jun-Ho Huh*

**4. Efficient LMS System Development and Its Test Bed for e-Learning and Mobile Based Learning**

*Sooyoung Jung, Jun-Ho Huh, Seung-il Moon*

**5. Design System and Method of Server Based Firefighting Sprinkler Equipment**

*Sooyoung Jung, Jun-Ho Huh, Seung-il Moon*

**6. A Study on the Device that Controls Power Dispersion of Distribution Line and Its Method**

*Sooyoung Jung, Jun-Ho Huh, Seung-il Moon*

**7. A Study on the Remote Monitoring of Distribution Line for Micro Grid**

*Sooyoung Jung, Jun-Ho Huh, Seung-il Moon*

**8. The Social Coding of Software Development: Focused on the Case Examples of Git-Hub and Stackoverflow**

*Wonseop Lee, Jun-Ho Huh*

**9. Journalism Based Summary Algorithm in Python**

*Wonseop Lee, Jun-Ho Huh*

**15:30-15:40      Coffee break**

**15:40-17:00      Session A-4 World-IT 2018**

**(HALL A)**

**(Chair: Sangkee Suk)**

**1. Experimental Study on the Impact of Electrical shock in Vehicle Wireless Charging Environments**

*Taejun Park, Kwang-il Hwang*

**2. A Systematic Method to Design Automation for Enterprise System based on .NET with MDA**

*Deuk Kyu Kum*



3. **Signal Outages of CSMA/CA based Wireless Networks with Different AP Densities**  
*Soo Hyun Cho*
4. **An approach to enhance data transfer performance utilizing a DTN in cloud environment**  
*Wontaek Hong, Jeonghoon Moon, Woojin Seok, Jinwook Chung*
5. **Time Synchronization Method for LPWA Using Simple Sync Procedure in IoT Wireless Network**  
*Sunghwan Kang, Minseok Seo, Joonyoung Eom, Bong-Hwan Lee*

**15:40-17:00      Session B-4 VASSI 2018 (Closed Workshop)**  
**(HALL B)**  
**(Chair: Hwankuk Kim)**

1. **Study on Binary Auto-Analysis Tools for Detecting Vulnerability**  
*Soojin Yoon, Geonbae Na, Taeun Kim, Hwankuk Kim*
2. **A Study on Automatic Patch Model to Respond to Memory Corruption Vulnerabilities**  
*Geonbae Na, Sanghwan Oh, Taeun Kim, Jungho Kang, Hwankuk Kim*
3. **Design of Hybrid Fuzzing System Based on Software Complexity Metrics**  
*JeeSoo Jurn, TaeEun Kim, HwanKuk Kim*
4. **A study on improvement of the existing vulnerability assessment system for the IoT environment**  
*Daeil Jang, Eunhye Ko, HwanKuk Kim*
5. **Keyword Generation for Vulnerability Information Using Multiple Topic Models**  
*Sarang Na, Taeun Kim, Hwankuk Kim*
6. **A study on a scanning engine for discovering vulnerable Internet-connected devices**  
*Hwankuk Kim, Taeun Kim, Daeil Jang*

**15:40-17:00      Session C-4 ISWP 2018 (Closed Workshop)**  
**(HALL C)**  
**(Chair: Yunsick Sung)**

1. **Cognitive Decision Engine Based on Binary Particles Swarm Optimization with Non-linear Decreasing Inertia Weight**  
*Chengzhuo Shi , Zheng Dou, Yun Lin*
2. **Real-time 3D Reconstruction for Objects using Sparse Point Clouds**  
*Seoungjae Cho, Kyungeun Cho*
3. **Collected Data Analysis-based RSSI Revision Method for UAVs**  
*Yunsick Sung*
4. **A Ground Smoothing Method based on Median Filter in 3D Environment Reconstruction System**  
*Mingyun Wen, Seoungjae Cho, Kyungeun Cho*
5. **Efficient Hierarchical Scheme for Sensor Data Management on Internet of Things with Cloud Computing**  
*Seungchul Kim, Hyun-Woo Kim, Gangman Yi, Doo-Soon Park, Young-Sik Jeong*
6. **Method for Object Removal from Ground Mesh and Billboard for Multi-sensor Fusion System**  
*Mingyun Wen, Seoungjae Cho, Kyungeun Cho*

**18:00 Keynote Speech II & Banquet**  
**(HALL B)**  
**(Chair: Kyung-Soo Lim)**

**“Intelligent Decision Computing Paradigms in Sustainable Computing”**  
*Arun Kumar Sangaiah, Ph.D.*  
*VIT University, Vellore, India*

**Day 3, Feb. 22, 2018 (Thursday)**

**10:00-12:00 Session A-5 IWIoE 2018 (Closed Workshop)**  
**(HALL A)**  
**(Chair: Daewon Lee)**

- 1. Cooperative Situation Awareness for User Authentication Using Smart Wearable**  
*Seung-Hyun Kim, Soo-Hyung Kim, Kyung-Soo Lim*
- 2. Parallel Hough Transform Method Based on GPU**  
*Qianlong Yang, Lili He, Longhai Jin, Ting Li, Hongtao Bai*
- 3. Job Submission Manager for Modeling and Simulation in Integrated Computing Environment**  
*Daeyong Jung, Myungil Kim, Jungha Lee, Han-Yee Kim, Daewon Lee*
- 4. Context-Aware Multimodal Authentication for FIDO Authenticator**  
*Seung-Hyun Kim, Jong-Hyuk Roh, Seok-Hyun Kim, Soo-Hyung Kim, Kyung-Soo Lim*
- 5. A Survey on Mobile Edge Cloud Computing**  
*Thanongsak Xayasouk, DaeWon Lee, HwaMin Lee*
- 6. An Implicit Privacy Risk Assessment Based on Accumulated Exposure of Private Information for Unmodified Android**  
*Seung-Hyun Kim, Soo-Hyung Kim, Kyung-Soo Lim*
- 7. Data deduplication system in cloud storage environment**  
*Won-Bin Kim, Im-Yeong Lee*
- 8. A Functional Consideration for Intelligent Video Surveillance using Cloud Computing**  
*Kyung-Soo Lim, Jong Wook Han, Geon-Woo Kim*

**13:00-15:00 Executive Meeting - Organized by World IT 2018**

**16:00-17:30 Organizing Committee Meeting II**

## Conference Venue



### Booyoung Jeju Hotel

Booyoung Hotel & Resort Jeju  
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