

**The International Conference on  
Future Information Technology,  
applications and services  
(IFIT 2018 Seoul)**

November 23, 2018  
Seoul, Korea

**Organized by**

**IFIT & KIPS CSWRG**

**2018 International Conferences**  
(Sponsored / Technically Sponsored by KIPS / KIPS CSWRG)

**Dec. 17 - 19, Kuala Lumpur, Malaysia**

- The 13th KIPS International Conference on Ubiquitous Information Technologies and Applications (CUTE 2018)
- The 10th International Conference on Computer Science and its Applications (CSA 2018)

## Message from the IFIT 2018 General Chairs

IFIT 2018 is the third event of the series of international scientific conference. This conference takes place on November 23, 2018 in Seoul, Korea. The aim of the IFIT 2018 is to provide an international forum for scientific research in the technologies and application of information technology.

The conference papers included in the proceedings cover the following topics: Internet of Things and Sensors, Embedded system and Middle ware, Security and Trust Computing, Multimedia Computing, Networking and Communications, Big data and Data mining, Cloud Computing, Web and Internet Computing, Grid and Cloud computing, Green IT and Sustainable Computing, Computational Intelligent Computing, Human-centric Computing. Accepted and presented papers highlight new trends and challenges of future information technologies. We hope readers will find these results useful and inspiring for their future research.

We would like to express our sincere thanks to Program Chairs: Jin Wang (Changsha University of Science & Technology, China), Neil Yen (University of Aizu, Japan), Yunsick Sung (Dongguk University, Korea), all Program Committee members, and all reviewers for their valuable efforts in the review process that helped us to guarantee the highest quality of the selected papers for the conference.

We cordially thank all the authors for their valuable contributions and the other participants of this conference. The conference would not have been possible without their support. Thanks are also due to the many experts who contributed to making the event a success.

IFIT 2018 General Chairs

Jong Hyuk Park, Seoul National University of Science and Technology, Korea  
Yi Pan, Georgia State University, USA  
Young-Sik Jeong, Dongguk University, Korea  
Ka Lok Man, Xi'an Jiaotong-Liverpool University, China

## Message from the IFIT 2018 Program Chairs

Welcome to the 2018 International Conference on Future Information Technology, applications and services (IFIT 2018), which will be held in Seoul, Korea on November 23, 2018. IFIT 2018 will be the most comprehensive conference focused on the various aspects of information technologies. It will provide an opportunity for academic and industry professionals to discuss recent progress in the area of future information technologies. In addition, the conference will publish high quality papers which are closely related to the various theories and practical applications in multimedia and ubiquitous engineering. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in these important subjects.

For IFIT 2018, we received many paper submissions, after a rigorous peer review process, we accepted only articles with high quality for the IFIT 2018 proceedings, published by the Springer. All submitted papers have undergone blind reviews by at least two reviewers from the technical program committee, which consists of leading researchers around the globe. Without their hard work, achieving such a high-quality proceeding would not have been possible. We take this opportunity to thank them for their great support and cooperation. Finally, we would like to thank all of you for your participation in our conference, and also thank all the authors, reviewers, and organizing committee members. Thank you and enjoy the conference!

IFIT 2018 Program Chairs

Jin Wang, Changsha University of Science & Technology, China  
Neil Yen, University of Aizu, Japan  
Yunsick Sung, Dongguk University, Korea

## Organization

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Yi Pan, Georgia State University, USA  
Young-Sik Jeong, Dongguk University, Korea

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# PROGRAM SCHEDULE FOR IFIT 2018

<b>Day 1, November 23, 2018</b>		
<b>10:00-11:00</b>	60	<b>Local Arrangement Committee Meeting</b>
<b>11:00-12:00</b>	60	<b>Organizing Committee Meeting Executive Meeting - Organized by IFIT 2018</b>
<b>12:00-12:40</b>	40	<b>Break</b>
<b>12:40-13:00</b>	20	<b>Registration</b>
<b>13:00-14:30</b>	90	<b>Session A-1</b> Chair: Byeong-Seok Shin
<b>14:30-14:40</b>	10	<b>Coffee Break</b>
<b>14:40-16:10</b>	90	<b>Session A-2</b> Chair: Yong-Hwan Kim
<b>16:10-17:10</b>	60	<b>Session A-3</b> Chair: Jong Hyuk Park
<b>17:10-18:00</b>	50	<b>Break</b>
<b>18:00-19:30</b>	90	<b>Banquet</b> Chair: Yunsick Sung

1. Each paper should be presented by one of authors for 15 minutes (10 minutes for the presentation itself and 5 minutes for Q/A).
2. All speakers of each paper should meet the corresponding 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 INTERNATIONAL CONFERENCE ON FUTURE INFORMATION TECHNOLOGY, APPLICATION AND SERVICES (IFIT-18)

Day 1, November 23, 2018 (Friday)

10:00-11:00 Local Arrangement Committee Meeting  
(HALL A)

11:00-12:00 Organizing Committee Meeting & Executive Meeting - Organized by IFIT 2018  
(HALL A)

12:00-12:40 Break

12:40-13:00 Registration

13:00-14:30 Session A-1  
(HALL A)  
(Chair: Byeong-Seok Shin)

1. **A scheme of network anomaly detection using deep Q-learning**  
*Chayoung Kim, JiSu Park*
2. **Intelligent Agent Grouping Recommendation Method**  
*Haitao Guo, Kayumiy Shokh Jakhon, Kyungeun Cho*
3. **Classification of Driver Characteristics using Convolutional Neural Network**  
*Weiqiang Zhang, Kaisi Huang, Yulong Xi, Kyungeun Cho*
4. **Study on Analysis of broadcasting-consumption impact through construction of SO-PMI based Consumption Sentiment Dictionary**  
*Jinah Kim, Namme Moon*
5. **Design of Recommendation System for tourist spot using Sentiment Analysis based on CNN-LSTM**  
*Hyeon-woo An, Namme Moon*
6. **Simulator considering Modeling and Performance Evaluation for High-throughput computing of collaborative-based mobile cloud infrastructure**  
*Hyun-Woo Kim, Young-Sik Jeong*

14:30-14:40 Coffee Break

14:40-16:10 Session A-2  
(HALL A)  
(Chair: Yong-Hwan Kim)

1. **Finding Lane Lines on the Road for Vehicle to Gird**  
*Jeong-Ho Bak, Jun-Ho Huh*
2. **Time Value of Electric Power: Calculation of Spot Price and Option Value for Future Options Flow Using Python**  
*Seung-Mo Je, Jun-Ho Huh*
3. **Distributed Parallel Processing Platform based on Virtual Machine for Deep Learning model Inference**  
*YoonKi Kim, Seong-Soo Han, Chang-Sung Jeong*
4. **A Study on Identification System Model for Face Recognition in Deep Learning Platform Environment**  
*Seong-Soo Han, You-Boo Jeon, JinSoo Park, Byung-Joon Park, Keun-Ho Lee*
5. **Location-Aware Cloud Resource Selection for 5G Network Services Based on SDN and NFV**  
*Yong-hwan Kim, Joon-Min Gil, Dongkyun Kim*
6. **Performance Analysis of 100Gbps TCP Throughput in KREONET WAN**  
*Chanjin Park, Wonhyuk Lee, Kyuil Kim, Jinhyung Park, Moon-hyun Kim*

**16:10-17:10**    **Session A-3**

**(HALL A)**

**(Chair: Jong Hyuk Park)**

1. **Density-based Place Clustering on Keyword-Matched Data**  
*Byoungwook Kim, Hong-Jun Jang*
2. **New Haptic Rendering for Pin-Array Devices**  
*Sang-Youn Kim, Yu-Joon Kim, Dong-Soo Choi, Byeong-Seok Shin*
3. **Hardware-based Adapting Terrain Mesh**  
*Eun-Suk Lee, Byeong-Seok Shin*
4. **An Efficient Algorithm on Generating Concept Lattice for Symmetry Formal Context**  
*Fei Hao, Yixuan Yang, Beibei Pang, Neil Y Yen, Doo-Soon Park*
5. **Blockchain-based Digital Evidence Integrity Verification**  
*Jung Hyun Ryu, Jong Hyuk Park*

**17:10-18:00**    **Break**

**18:00-19:30**    **Banquet**

**(The King's, Grand Ambassador Seoul associated with Pullman)**

**(Chair: Yunsick Sung)**



# CONFERENCE VENUE

## Dongguk University



### Address

- #5159, 5F, New Engineering Building – 신공학관 5159 호, Dongguk University  
26, Pil-dong, 3-ga, Jung-gu, Seoul 04620, Korea

### URL

- <http://www.dongguk.edu/mbs/en/index.jsp>

### MAP

- New Engineering Build is located at 32 in the below map.

