

**The International Conference on
Future Information Technology,
applications and services
(IFIT 2017 Seoul)**

October 12-14, 2017
Seoul, Korea

Organized by

IFIT & KIPS CSWRG

2017 International Conferences
(Sponsored / Technically Sponsored by KIPS / KIPS CSWRG)

Dec. 18 - 20, Taichung, Taiwan

- The 12th KIPS International Conference on Ubiquitous Information Technologies and Applications (CUTE 2017)
- The 9th International Conference on Computer Science and its Applications (CSA 2017)

Message from the IFIT 2017 General Chairs

IFIT 2017 is the second event of the series of international scientific conference. This conference takes place on October 12-14, 2017 in Seoul, Korea. The aim of the IFIT 2017 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 (Nanjing University of Information Science and 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 2017 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
Gangman Yi, Dongguk University, Korea
Ka Lok Man, Xi'an Jiaotong-Liverpool University, China

Message from the IFIT 2017 Program Chairs

Welcome to the 2017 International Conference on Future Information Technology, applications and services (IFIT 2017), which will be held in Seoul, Korea on October 12–14, 2017. IFIT 2017 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 2017, we received many paper submissions, after a rigorous peer review process, we accepted only articles with high quality for the IFIT 2017 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 2017 Program Chairs

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

Organization

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Jong Hyuk Park, SeoulTech, Korea
Yi Pan, Georgia State University, USA
Young-Sik Jeong, Dongguk University, Korea

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PROGRAM SCHEDULE FOR IFIT 2017

Day 1, October 12, 2017		
Time	Min	HALLA
09:00-12:00	180	Local Arrangement Committee Meeting
13:00-15:00	120	Organizing Committee Meeting I
16:00-17:00	60	Executive Meeting I - Organized by IFIT 2017

[ONLY FOR INVITED MEMBERS]

Day 2, October 13, 2017		
Time	Min	HALLA
08:50-09:15	25	Registration
09:15-10:30	75	Session A-1 Chair : Nammee Moon
10:30-10:45	15	Coffee Break
10:45-12:00	75	Session A-2 Chair : JoonMin Gil
12:00-13:00	60	Lunch
13:00-14:15	75	Session A-3 Chair : Kyungeun Cho
14:15-14:30	15	Coffee Break
14:30-15:45	75	Session A-4 Chair : Jun-Ho Huh
15:45-18:00	135	Break
18:00-20:00	120	Banquet

Day 3, October 14, 2017		
Time	Min	HALLA
09:00-10:30	90	Organizing Committee Meeting II
10:30-10:40	10	Break
10:40-12:10	90	Executive Meeting II - Organized by IFIT 2017

[ONLY FOR INVITED MEMBERS]

1. A paper presentation should be made by one of authors of the paper for 15 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 INTERNATIONAL CONFERENCE ON FUTURE INFORMATION TECHNOLOGY, APPLICATION AND SERVICES (IFIT-17)

Day 1, October 12, 2017 (Thursday)

09:00-12:00 Local Arrangement Committee Meeting
(HALL A)

13:00-15:00 Organizing Committee Meeting I
(HALL A)

16:00-17:00 Executive Meeting I - Organized by IFIT 2017
(HALL A)

Day 2, October 13, 2017 (Friday)

08:50-09:15 Registration

09:15-10:30 Session A-1
(HALL A)
(Chair Nammee Moon)

- 1. An Optimal Model of Plum Plant Diseases Forecasting with Weather Conditions**
Vasanth Ragu, Myeongbae Lee, Chulyoung Park, Hyunwook Cho, Yongyun Cho, Jangwoo Park, Changsun Shin
- 2. A Study for Best-Fit Machine Learning Model based on Decision Tree**
Saraswathi Sivamani, Chulyoung Park, Changsun Shin, Jangwoo Park, Yongyun Cho
- 3. Learning activity indicator model for learning analysis in TEL environment**
Kyungrog Kim, Nammee Moon
- 4. A study on Recommendation through user modeling based on emotional analysis and consumption behavior pattern analysis**
Jinah Kim, Nammee Moon
- 5. Template-based Medical Imaging Information Providing Method centered on a Specific Disease**
Ye-Seul Park, Jung-Won Lee

10:30-10:45 Coffee break

10:45-12:00 Session A-2

(HALL A)

(Chair: JoonMin Gil)

- 1. Fault Tolerant Scheduling Strategies in Mobile Cloud Computing**
JongHyuk Lee, JoonMin Gil
- 2. A Distributed Snapshot Protocol for Efficient Artificial Intelligence Computation in Cloud Computing Environments**
JongBeom Lim, HeonChang Yu, Joon-Min Gil
- 3. Cloud-centric and Logically Isolated Virtual Networks Development based on Software-Defined Wide Area Network**
Dongkyun Kim, Yong-Hwan Kim, Ki-Hyun Kim, Joon-Min Gil
- 4. Graph-Based Programming Based on Soft Computing for Construction of 3D Giwa Houses**
Mankyu Sung
- 5. A Location-Sensitive Over-the-Counter Medicines Recommender based on Tensor Decomposition**
Fei Hao, Doo-Soon Park, Xiaoyan Yin, Xiaoming Wang

12:00-13:00 Lunch

13:00-14:15 Session A-3

(HALL A)

(Chair: Kyungeun Cho)

- 1. Fast and effective nonground modeling of 3D dynamic environment by using multiple types of sensor data**
Phuong Minh Chu, Seoungjae Cho, Kyungeun Cho
- 2. Object Tracking Method in a 3D Point Cloud Using a Kalman Filter**
Weiqiang Zhang, Seoungjae Cho, Jeongsook Chae, Yunsick Sung, Kyungeun Cho
- 3. Genetic Algorithm-based Enhanced Motion Estimation Method using Orientations and EMGs for Robot Control**
Jeongsook Chae, Yong Jin, Yunsick Sung, Kyungeun Cho
- 4. Camera Image Cropping Approach for End-to-End Controls of Self-Driving Cars based on CNN**
Yunsick Sung, Yong Jin, Jeonghoon Kwak, Kyungeun Cho, Sang-Geol Lee
- 5. Quaternion Estimation Method of MYO using K-means Clustering and Bayesian Probability for Humanized Computing**
Sang-Geol Lee, Yunsick Sung

14:15-14:30 Coffee break

14:30-15:45 Session A-4

(HALL A)

(Chair: Jun-Ho Huh)

- 1. Virtual Reality based Learning Experience in Engineering Education**
Tami Im, Byung Seok Shin, Sang-Youn Kim

2. **Synchronization Manager for Son of Grid Engine**
Daeyong Jung, Daewon Lee, Myungil Kim, Jaesung Kim
3. **An Efficient Cryptosystem in SoIP Environment**
Sungwook Eom, Jun-Ho Huh
4. **An Efficient Nuclear Power Plant Security Measure Using Big Data Analysis Approach**
Sangdo Lee, Jun-Ho Huh
5. **Novel Method for Computational Balance of Sequence Alignments on Clustered Computers**
Jaehee Jung, Gangman Yi

15:45-18:00 Break

18:00-20:00 Banquet

Day 3, October 14, 2017 (Saturday)

09:00-10:30 Organizing Committee Meeting II
(HALL A)

10:30-10:40 Break

10:40-12:10 Executive Meeting II - Organized by IFIT 2017
(HALL A)

CONFERENCE VENUE

Dongguk University



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