
The International Conference on Big data, IoT, and Cloud Computing (BIC 2018)
The 19th International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT 2018)

**The International Conference on
Big data, IoT, and Cloud Computing (BIC 2018)
&
The 19th International Conference on Parallel and
Distributed Computing, Applications and
Technologies(PDCAT2018)**

August 20-22, 2018
Jeju, Korea

Organized by

KIPS CSWRG



The International Conference on Big data, IoT, and Cloud Computing (BIC 2018)
The 19th International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT 2018)

2018 International Conferences
(Sponsored / Technically Sponsored by KIPS / KIPS SWRG)

The 10th International Conference on Computer Science and its Applications
(CSA 2018)

- December, 17-19, 2018, Kuala Lumpur, Malaysia
- <http://www.csa-conference.org/2018>

The 13th KIPS International Conference on Ubiquitous Information Technologies and Applications
(CUTE 2018)

- December, 17-19, 2018, Kuala Lumpur, Malaysia
- <http://www.cute-conference.org/2018>

Message from the BIC 2018 General Chairs

The 2018 International Conference on Big data, IoT, and Cloud Computing will be held in Jeju, Korea, August 20-22, 2018. The BIC 2018 is the newly renamed conference from highly successful series of the International Conference on Ubiquitous Computing Application and Wireless Sensor Network (UCAWSN) - 4th UCAWSN (July, 2016), 3rd UCAWSN (July, 2015), 2nd UCAWSN (July, 2014), and 1st UCAWSN (July, 2013) since 2013.

The BIC 2018 will be the most comprehensive conference focused on Big data, IoT, and Cloud Computing (BIC). The BIC 2018 will provide an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of BIC such as model, algorithms, applications, services, performance and reliability for Big data, IoT, Cloud Computing. Also, the conference will publish high-quality papers which are closely related to the various theories and practical applications in Big data, IoT, and Cloud computing. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in those important subjects. Accepted and presented papers highlight new trends and challenges of Computer Science and its Applications. The presenters showed how new research could lead to novel and innovative applications. We hope you will find these results useful and inspiring for your future research.

We would like to express our sincere thanks to Doo-soon Park (SoonChunHyang University, Korea), James J. (Jong Hyuk) Park (SeoulTech, Korea), and Young-Sik Jeong (Dongguk University, Korea). Our special thanks go to the Program Chairs, all Program Committee members and all the additional reviewers for their valuable efforts in the review process, which 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.

BIC 2018
General Chairs

Han-Chieh Chao, National Ilan University, Taiwan
Jungho Kang, Baewha Women's University, Korea
Qun Jin, Waseda University, Japan
Yi Pan, Georgia State University, USA

Message from the BIC 2018 Program Chairs

Welcome to the BIC 2018 which will be held in Jeju, Korea on Aug 20~22, 2018. The BIC 2018 provides an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of Computer Science. In addition, the conference contains high quality papers which are closely related to the various theories and practical applications in Computer Science. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject. The BIC 2018 contains high quality research papers submitted by researchers from all over the world. Each submitted paper was peer-reviewed by reviewers who are experts in the subject area of the paper. Based on the review results, the Program Committee accepted papers.

For organizing an International Conference, the support and help of many people is needed. First, we would like to thank all authors for submitting their papers. We also appreciate the support from program committee members and reviewers who carried out the most difficult work of carefully evaluating the submitted papers.

We would like to give my special thanks to Doo-soon Park (SoonChunHyang University, Korea), James J. (Jong Hyuk) Park (SeoulTech, Korea), Young-Sik Jeong (Dongguk University, Korea) as the Steering Committee of BIC for their strong encouragement and guidance to organize the conference. We would like to thank BIC 2018 General Chairs for their advices to make possible organization of The BIC 2018. We would like to express special thanks to execute members for their timely unlimited support.

BIC 2018
Program Chairs

Arun Kumar Sangaiah, VIT University, India
Jin Wang, Changsha University of Science & Technology, China
Daewon Lee, SeoKyeong University, Korea
Kyung-Soo Lim, ETRI, Korea

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Seokhong Min, Mindata co, Korea
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Shih-Lin Wu, Chang Gung University, Taiwan
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Tzung-Pei Hong, National University of Kaohsiung, Taiwan
Watanobe Yutaka, University of Aizu, Japan
Xingcheng Liu, Sun Yat-sen University, China
Yu Zhang, Los Alamos National Laboratory, USA
Yu-Chen Hu, Providence University, China
Zhiyi Huang, University of Otago, New Zealand
Jianming Zhang, Changsha University of Science & Technology, China
Daojian Zeng, Changsha University of Science & Technology, China
Lingyun Xiang, Changsha University of Science & Technology, China
Qiang Tang, University of Essex, UK
Bing Xiong, Temple University, USA
Yan Gui, Nanyang Technological University, Singapore
Wei Liu, Yangzhou University, China
Xiang Yin, Yangzhou University, China
Yuhui Zheng, Nanjing University of Information, Science and Technology, China
Yongjun Ren, Nanjing University of Information, Science and Technology, China
Jiao Yao, University of Shanghai for Science and Technology, China
Jin Liu, Shanghai Maritime University, China
Yun Lin, Harbin Engineering University, China
Michaela Geierhos, Universitat Paderborn, Germany
Mohammed Said Radjef, University of Bejaia, Algeria
Muhammad Javed, Dublin City University, Ireland
Muhammad Naufal Mansor, University Malaysia Perlis, Malaysia
Nader F. Mir, San Jose State University, USA
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Prasan Kumar Sahoo, Chang Gung University, Taiwan
Ren-Song Ko, National Chung Cheng University, Korea
Rosa Lasaponara, National Research Council, Italy
Ruben Rios, Universidad de Malaga, Spain
Ryszard Tadeusiewicz, AGH University of Science and Technology, Poland
Sheng-Shih Wang, Minghsin University of Science and Technology, Taiwan
Soon M. Chung, Wright State University, USA
Sun-Yuan Hsieh, National Cheng Kung University, Taiwan
Tzung-Pei Hong, National University of Kaohsiung, Taiwan
Wei Liu, Yangzhou University, China
Yan Jun, University of Wollongong, Australia
Yu-ChenHu, Providence University, Taiwan
Yutaka Watanabe, University of Aizu, Japan

Message from the PDCAT 2018 General Chairs

The 19th International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT) is a major forum for scientists, engineers, and practitioners throughout the world to present their latest research, results, ideas, developments and applications in all areas of parallel and distributed computing. Beginning in Hong Kong in 2000, PDCAT-18 will be held in Jeju, Korea after 18 years of successful journey through various countries/regions including Taiwan, Japan, China, Singapore, Australia, New Zealand, and Korea across Asia-Oceania. We are inviting new and unpublished papers.

The conference papers included in the proceedings cover the following topics: PDCAT of Networking and Architectures, Software Systems and Technologies, Algorithms and Applications, and Security and Privacy. Accepted and presented papers highlight new trends and challenges of Parallel and Distributed Computing, Applications and Technologies. We hope readers will find these results useful and inspiring for their future research.

Our special thanks go to the Program Chairs: Houcine Hassan (Universitat Politècnica de València, Spain), Hui Tian (Griffith University, China), Yunsick Sung (Dongguk University, Korea) and 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.

PDCAT 2018 General Chairs

James Park, SeoulTech, Korea
Yi Pan, Georgia State University, USA
Young-Sik Jeong, Dongguk University, Korea
Hong Shen, University of Adelaide, Australia
Qun JIN, Waseda University, Japan

Organization

Honorary Chair

Doo-soon Park, SoonChunHyang University, Korea

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Hong Shen, University of Adelaide, Australia

Qun JIN, Waseda University, Japan

Program Chairs

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Hui Tian, Griffith University, China

Yunsick Sung, Dongguk University, Korea

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Kyung-Soo Lim, ETRI, Korea

Neil Y. Yen, The University of Aizu, Japan

Rossi Kamal, IEEE Seoul Chapter, Korea

Yingpeng Sang, Sun Yat-sen University, China

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Jungho Kang(Chair), Baewha Women's University, Korea

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Hui Tian, Beijing Jiaotong University, China

I-Cheng Chang, National Dong Hwa University, Taiwan

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Jaeshup Oh, Sookmyung Women's University, Korea
Javier Martínez Torres, Centro Universitario de la Defensa, Spain
Jun Wu, Beijing Jiaotong University, China
Jun Yan, University of Wollongong, Australia
Kaijun Ren, National University of Defense Technology, China
Kapetanios Epaminondas, University of Westminster, United Kingdom
Kenli Li, Hunan University, China
Li Tao, XI'AN University of Posts&Telecommunications, China
Manu Malek, Institute of Electrical and Electronics Engineers Inc, USA
Manuel Dominguez-Morales, University of Seville, Spain
Maytham Safar, Kuwait University, Kuwait
Michael Sheng, Macquarie University, Australia
Nitaigour Premchand Mahalik, California State University, USA
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Rajkumar Buyya, University of Melbourne, Australia
Ren-Song Ko, National Chung Cheng University, Taiwan
Sheng-Shih Wang, Minghsin University of Science and Technology, Taiwan
Soon M. Chung, University Dayton, USA
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Teofilo Gonzalez, University of California Santa Barbara, USA
Ye Tian, University of Science and Technology of China
Yidong Li, Beijing Jiaotong University, China
Yu Zhang, Los Alamos National Laboratory, USA
Yu-Chen Hu, Providence University, China
Zhiyi Huang, University of Otago, New Zealand

Keynote Speaker I



Empowering Cognitive Security Systems with Computational Intelligence & Granular Computing

Vincenzo Loia Ph.D.

Chair Professor

Department of Management and Innovation Systems

University of Salerno, Italy

Abstract

To solve the pressing security challenges of our era, we need more creative approaches capable to detect connections between relations, events concepts, in evolving context characterized by an explosive mixture of structured and unstructured data coming up from multiple sensor and human based networks. In this talk we explore how to integrate Granular Computing and Computational Intelligence with security based systems in order to enrich the cognitive power. We present the evolution of a framework where different application scenarios are described, evidentiating the benefits arising from such an integration. This novel integration can be viewed as a novel paradigm useful to design, build, and deploy distributed systems suitable for Smart Cities.

Biography

Professor Vincenzo Loia received B.S. degree in computer science from University of Salerno, Italy in 1985 and the M.S. and Ph.D. degrees in computer science from University of Paris VI, France, in 1987 and 1989, respectively. From 1989 he is Faculty member at the University of Salerno where he teaches Safe Systems, Situational Awareness. His current position is as Chair and Professor of Computer Science at Department of Management and Innovation Systems. He is the editor-in-chief of Evolutionary Intelligence and the editor-in-chief of Ambient Intelligence and Humanized Computing, both from Springer. He is an Associate Editor of various journals, including the IEEE Transactions on System, Man and Cybernetics: Systems; IEEE Transactions on Fuzzy Systems; IEEE Transactions on Industrial Informatics; IEEE Transactions on the IEEE Transactions on Cognitive and Developmental Systems. His research interests include soft computing, agent technology for technologically complex environments Web intelligence, Situational Awareness He was principal investigator in a number of industrial R&D projects and in academic research projects. He is author of over 400 original research papers in international journals, book chapters, and in international conference proceedings. He hold in the last years several role in IEEE Society in particular for Computational Intelligence Society (Chair of Emergent Technologies Technical Committee, IEEE CIS European Representative, Vice-Chair of Intelligent Systems Applications Technical Committee).

Keynote Speaker II



Blockchain for Smart Communities: Opportunities and challenges

Neeraj Kumar, Ph.D.

Professor,

Department of Computer Science & Engineering

Thapar Institute of Engineering and Technology

Punjab, India

Abstract

From the last few decades there has been an exponential increase in the usage of Internet-enabled devices which raises the issues of security and privacy of the data among the end users. The traditional existing cryptographic primitives are not sufficient to solve these problems due to their heavy computation and communication costs. However, during this era, there is an evolution of new distributed ledger based technology called as Blockchain. Blockchain is a specific distributed shared database, which has been illustrated to possess salient advantages including security, immutability, and decentralization. It allows every transaction to be recorded in a verifiable and permanent way, which is essential to create a distributed, transparent, and secure energy-trading environment.

However, various issues in blockchain are still in their infancy and need novel contribution from the research community to address these issues. For example, proof of work used for block verification requires heavy cryptographic primitives computation. Hence, efficient decisions need to be taken that whether this proof of work needs to be executed on resource constrained smart devices or powerful servers. Secondly, blocks in the blockchain use storage space before any operation to be carried out. Hence, efficient usage of various data structures is prerequisite for successful implementation of any solution in this environment. So, the issues such as searching and indexing play a vital role with respect to efficient implementation. Verification and validation of the blocks created also is important issues need to be analysed before any block to be included in the chain of blocks. So, verification and validation time for the blocks verification is also an important issue to be discussed. Hence, in this talk we will explore the applicability of blockchain for various IoT application, challenges to implement blockchain for real world critical applications, and future scope of this emerging technology.

Biography

Neeraj Kumar (M16, SM) received the Ph.D. degree in computer science and engineering from Shri Mata Vaishno Devi University, Jammu and Kashmir, India, and worked as a Postdoctoral Research Fellow with Coventry University, Coventry, U.K. He is working as an Associate Professor with the Department of Computer Science and Engineering, Thapar Institute of Engineering and Technology (Deemed to be University), Patiala, India. Dr. Kumar has coauthored more than 200 technical research papers in leading journals and conferences from IEEE, Elsevier, Springer, John Wiley etc. Some of his research findings are published in top cited journals such as IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, IEEE TRANSACTIONS ON DEPENDABLE AND SECURE COMPUTING, IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, TRANSACTIONS ON INDUSTRIAL INFORMATICS, IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, IEEE INTELLIGENT TRANSPORTATION SYSTEMS MAGAZINE, IEEE NETWORK, IEEE COMMUNICATIONS MAGAZINE, IEEE WIRELESS COMMUNICATIONS, IEEE INTERNET OF THINGS JOURNAL, IEEE SYSTEMS JOURNAL, Future Generation Computing Systems, Journal of Network and Computer Applications, and ComCom. He has

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guided many research scholars leading to Ph.D. and M.E./M.Tech degree. His research is supported by funding from UGC, DST, CSIR, and TCS. He is an Associate Technical Editor of IEEE Communication Magazine and an Associate Editor of IJCS, Wiley, JNCA, Elsevier, and Security & Communication, Wiley.

He is a member of Cyber Physical System research group where his team is exploring various aspects related to security, privacy, network management and embedded systems. He has supervised various Ph.D. and M.E. thesis. He is member of various professional bodies across the globe.

Workshop Keynote Speaker



Smart Wellness and Healthcare Systems

Fei Hao, Ph.D.
Associate Professor,
the School of Computer Science,
Shaanxi Normal University, China

Abstract

TBA

Biography

Dr. Hao is an associate professor, in the School of Computer Science, Shaanxi Normal University, China, and he is also an executive director of Shanxi Association of Experts and Scholars (SAES) Information Branch. He received the B.Sc. degree in Information and Computing Science and the M.Sc. degree in Computer Software and Theory from Xihua University, China, in 2005 and 2008, respectively, and the Ph.D. degree in Computer Science and Engineering from Soonchunhyang University, South Korea, in 2016. He worked as a research fellow at the School of Computer Science and Technology, Huazhong University of Science and Technology, China from 2012 to 2014. Since 2016, he has been with the School of Computer Science, Shaanxi Normal University, China, where he is currently an associate professor. His research interests include social computing, soft computing, big data analytics, pervasive computing, and data mining. Dr. Hao holds a world-class research track record of publication in the top international journals and the prestigious conferences. He has published more than 60 papers in the leading international journals and conference proceedings, such as IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Services Computing, IEEE Communications Magazine, IEEE Internet Computing, ACM Transactions on Multimedia Computing, Communications and Applications as well as GlobeCom. In addition, he was the recipient of five Best paper awards from CUTE 2016, UCASWSN 2015, MUE2015, IEEE GreenCom 2013 and KISM 2012 conferences, respectively. He was also the recipient of the IEEE Outstanding Leadership Award at IEEE CPSCom 2013 and the 2015 Chinese Government Award for Outstanding Self-Financed Students Abroad. Since 2018, he has joined JIPS (Journal of Information Processing Systems) editorial board, where he is currently an associate editor, and he is an initiator and general chair of IEEE SMMA, IWSCA and DSCI workshops. He is also a member of ACM, CCF and KIPS.

PROGRAM SCHEDULE FOR BIC 2018/PDCAT 2018

Day 1, Aug. 20, 2018		
Time	Min	HALL -A
10:00-12:00	120	Organizing Committee Meeting I (Only for Invited Members)
13:00-15:00	120	Local Arrangement Committee Meeting (Only for Invited Members)
16:00-17:30	90	Executive Meeting - Organized by BIC 2018 (Only for Invited Members)

Day 2, Aug. 21 2018				
Time	Min	HALL A	HALL B	HALL C
08:40-09:00	20	Registration		
09:00-10:30	90	Session A-1 BIC2018 Chair : Jin Liu	Session B-1 W1 HCIS2018 Chair : Byoungwook Kim	Session C-1 W2 JIPS2018 Chair : Byoungwook Kim
10:30-10:40	10	Coffee Break		
10:40-12:00	80	Session A-2 BIC2018 Chair : Wei Liu	Session B-2 W1 HCIS2018 Chair : Byoungwook Kim	Session C-2 PDCAT 2018 Chair : Yeong-Seok Seo
12:00-13:00	60	Lunch		
13:00-13:30	30	Empowering Cognitive Security Systems with Computational Intelligence & Granular Computing Vincenzo Loia Ph.D. Professor at University of Salerno Chair: Kwang-il Hwang		
13:30-14:00	30	Blockchain for Smart Communities: Opportunities and challenges Neeraj Kumar, Ph.D. Professor at Thapar Institute of Engineering and Technology Chair: Kwang-il Hwang		

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14:00-14:10	10	Coffee Break		
14:10-15:30	80	Session A-3 BIC2018 Chair : Wanhyun Cho	Session B-3 W3 IWFTS2018 Chair : Yoojae Won	Session C-3 PDCAT 2018 Chair : Jong-Myon Kim
15:30-15:40	10	Coffee Break		
15:40-17:00	80	Session A-4 BIC2018 Chair : Kwangman Ko	Session B-4 W4 Wellness 2018 Chair : Se Dong Min	Session C-4 PDCAT 2018 Chair : Yunsick Sung
18:00-		Banquet (HALL B) Chair: Kwang-il Hwang		

Day 3, Aug. 22 2018				
Time	Min	HALL A	HALL B	HALL C
09:00-10:40	100	Session A-5 BIC2018 Chair : HyungJun Kim	Session B-5 W5 HRH2018 Chair : Jun-Ho Huh	Session C-5 PDCAT 2018 Chair : Jehn-Ruey Jiang
10:40-10:50	10	Coffee Break		
10:50-12:30	100	Session A-6 BIC2018 Chair : Jun-Ho Huh	Session B-6 W6 ICC2018 Chair : YangSun Lee	Session C-6 PDCAT 2018 Chair : Cheol Hong Kim

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 BIC 2018 / PDCAT 2018

Day 2, Aug. 21, 2018 (Tuesday)

08:40-09:00 Registration

09:00-10:30 Session A-1 : Big Data

(HALL A)

(Chair: Jin Liu)

- 1. 3D Reconstruction using sequence images in Hadoop**
Dongyue Wang, Taeg Keun Whangbo
- 2. A Correlation Analysis of Factory Environmental Data Using Pearson Correlation Coefficient Based on Hadoop**
Songai Xuan, Wenquan Jin, DoHyeun Kim
- 3. A Deep Learning Approach for Forecasting Air Pollution in South Korea Using LSTM**
Tien Cuong Bui, Van Duc Le, Sang Kyun Cha
- 4. Analysis of Correlation between Weather and Delivery Service based on Bigdata**
Kwak Kwang-Jin, Park Ji-Hun, Shin Dong-Jin, Hwang Seung-Yeon, Kim Jeong-Joon
- 5. Comparison of OS Fingerprinting Tools Using Machine Learning**
JinHo Song, YooJae Won
- 6. Feature Visualization in Comics Artist Classification**
Young-Min Kim
- 7. Hand Gesture Recognition in Depth Videos using 3 Dimensional Convolution Neural Network**
Dinh Son Tran, Hyung-Jeong Yang, Soo-Hyung Kim, Guee Sang Lee, Mi-sun Kim
- 8. NDS: A Network Attached Storage based on Distributed File System for Big Data**
Xuhua Rui, Dugki Min
- 9. Real-time air pollution prediction based on spatiotemporal Big data**
Duc Le
- 10. Single RGB Image to 3D Point Cloud Translation Based on Generative Adversarial Networks**
Phuong Chu, Seoungjae Cho, Kaisi Huang, Kyung Cho
- 11. Travel Recommendation Systems using Big Data**
Hwang Seung-Yeon, Park Ji-Hun, Shin Dong-Jin, Kwak Kwang-Jin, Kim Jeong-Joon

09:00-10:30 Session B-1 : Workshop on HCIS2018

(HALL B)

(Chair: TBA)

- 1. Content-based Image Retrieval Using Combined Texture and Color Features Based on Multi-**

- resolution Multi-direction Filtering and Color Autocorrelogram**
Hee-Hyung Bu, Nam-Chul Kim, Kyoung-Woo Park, Sung-Ho Kim
- 2. WAVE: Workload-Adaptive Combination of Write Buffer and FTL for Multi-Channel SSD**
Sung Kyu Park, Seung-Ho Lim, Ki-Woong Park
 - 3. Blockchain -Based Sharing Strategy for Project Proposal in Hybrid Platform**
Eunhee Lee, Yongik Yoon
 - 4. WiFi Fingerprinting System using Arduino for indoor location recognition**
Giseong Kim, Hyunnoh Yun, Hyoungyup Kim, Sunmin Lee, Nammee Moon
 - 5. Interview Study on Evocativeness Effects of Cinemagraphs**
Ji-Seob Park, Hyeob Kim, HyukJun Kwon
 - 6. Comparative Analysis of 2D and 3D Facial Expression Recognition Based on RGB-D Camera**
Kunyoung Lee, Eui Chul Lee
 - 7. RINGA-IoT: Self-Adaptive Software Modeling and Game Theoretic Decision Making for Internet of Things**
Euijong Lee, Young-Gab Kim
 - 8. Design and Implementation of Compatibility Enhancement for Socket Interface and Performance Analysis**
Cheol Shim, Min Choi
 - 9. Infrared Bundle Adjusting and Clustering Method for Head-Mounted Display and Leap Motion Calibration**
San Park, Seoungjae Cho, Yunsick Sung, Kyungeun Cho

09:00-10:30 Session C-1 : Workshop on JIPS2018

(HALL C)

(Chair: TBA)

- 1. The Algorithm of Descent Deceleration of Drone Based on Arduino**
Seong-Heon Choi, Byoungwook Kim
- 2. Evaluating Prediction Models for Early Identification of Dropout Students**
JongHyuk Lee, JoonMin Gil
- 3. End-to-end Business Model for Freight Management System and O2O Service Big Data Analysis**
Suganya Selvaraj, Hanjun Kim, Eunmi Choi
- 4. Movie Recommendation System using Social Network Analysis and Collaborative Filtering**
khamphaphone Xinchang, Phonexay Vilakone, Doo-Soon Park
- 5. An Improved Clustering Model for Privacy Protection of Multimedia Data**
Chunyoung Yin, Yuhang Zhu, Jin Wang
- 6. Building Crowdsensing Based Saturation Prediction Model for Smart Parking System**
Mi Hui Kim, Junhueok Yun
- 7. Content-based Image Retrieval Using Multi-resolution Multi-direction Filtering Based CLBP Texture Features and Color Autocorrelogram Features**
Hee-Hyung Bu, Nam-Chul Kim, Byoung-Ju Yun, Yun-Mook Nah
- 8. A Novel Algorithm for Identifying Essential Proteins in Dynamic PPI network**
Wei Liu, Liangyu Ma, Ling Chen, Jin Wang, Bolun Chen

9. Experimental Study of Indoor Dew Condensation

Kwang-il Hwang

10. Index System of Urban Rail Transit and Bus Network Integration

Keran Song, xiaomei xia, Jing Wang

11. Mobile marketing recommendation method based on user location feedback

Chunyong Yin, Shilei Ding, Jin Wang

10:30-10:40 Coffee break

10:40-12:00 Session A-2 : ICT Applications and Services

(HALL A)

(Chair: Wei Liu)

1. Design of Multidimensional Data Analysis Algorithm for Efficient Big Data Analytics

Young-Hwan Jang, Seung-Su Yang, Min-Hyung Park, Hyung-Joon Kim, Seok-Cheon Park

2. Efficiency Verification of Hybrid Heat Pump System Using Ground Water for Public Building

Sanghwa Baek, Gyewoon Choi

3. Face Detection in 2D/3D Animation

Dong-Hyuck Im, Yong-Seok Seo, Jihyun Park

4. Fast Intra LCU Decision using Deep Neural Networks

Kyungah Kim, Won Woo Ro

5. Design of Digital Content Distribution Framework Supporting Blockchain-based Copyright Protection Technology

Byoungsoo Koh

6. Fast Parallel Processing System for Pedestrian Detection using a Deep Neural Network

Seong-Soo Han, You-Boo Jeon, Doo-Soon Park, Chang-Sung Jeong

7. Generating Conformance Testing Interfaces from Equipment Requirement Specification Using LSTM Network

Woongsup Kim, Jiyeon Kang, Hyojin Kim, Hanna Choi, Seungyeon Han

8. Study on Decision Making Model for Improvement of Water Supply Systems Considering Economy

Hyoun Geun Jo, Gye Woon Choi, Dong Woo Jang, Hyo Seon Park

9. Vehicle Detection and Speed Estimation for Automated Traffic Surveillance Systems at Nighttime

HyungJun Kim

10. Clustering Based Blockchain for Efficient Management and Production Smart Farming System

Jeong Hoon Jo, Jong Hyuk Park

11. Visual saliency detection in infrared images using Boolean map approach

Truong Mai, Sanghoon Kim

10:40-12:00 Session B-2 : Workshop on HCIS2018

(HALL B)
(Chair: TBA)

- 1. Enhancing Performance of Remote Execution and Resource Sharing in Mobile Opportunistic Networks**
Minh Le, Young-Woo Kwon
- 2. Enabling Multi-Hop Remote Method Invocation in Group-to-Group Mobile Networks**
Minh Le
- 3. Movie Recommendation System Using Improved K-cliques**
Phonexay Vilakone, Doo-Soon Park, Khamphaphone Xinchang, Fei Hao
- 4. Compressive Sensing-based, Privacy-aware Trajectory Data Management Method for Crowdsourcing System**
Yan Li, Byeong-seok Shin
- 5. Improving Network Coverage-based Sensor Registry System using a Grid**
Hyunjun Jung, Dongwon Jeong, Sukhoon Lee
- 6. Towards a Machine Learning Approach for Nutrition Requirement Prediction on Individual Livestock**
Saraswathi Sivamani, Myeongbae Lee, Saravana kumar Venkatesan, Changsun Shin, Jangwoo Park, Yongyun Cho
- 7. Clustering of Tour Routes for Individual Tourists using Sequential Pattern Mining**
Gun Ho Lee, Hee Sun Han
- 8. Enhanced Ground Segmentation Method for Lidar Point Clouds in Autonomous Robot Systems**
Phuong Chu, Seoungjae Cho, Mingyun Wen, Jisun Park, Simon Fong, Kyungeun Cho
- 9. Paper Classification Systems based on TF-IDF and LDA Schemes**
Joon-Min Gil, Sang-Woon Kim

10:40-12:00 **Session C-2 : PDCAT 2018**

(HALL C)
(Chair: Yeong-Seok Seo)

- 1. Autoencoder-based Anomaly Detection with Intrusion Scoring for Smart Factory Environments**
Gimin Bae, Sunggyun Jang, Minseop Kim, Inwhee Joe
- 2. SNet: Design of Optimized DCNN for Real-Time Face Detection**
Seunghyun Lee, Minseop Kim, Inwhee Joe
- 3. Efficient Scheduling Strategy for Data Collection in Delay-Tolerant Wireless Sensor Networks with a Mobile Sink**
Zhansheng Chen, Hong Shen, Tingmei Wang
- 4. Software Requirements for an Ultra large scale System to Compute Multi dimension Mean Failure Cost**
Mouna Jouini, Latifa Ben Arfa Rabai
- 5. Parallelization of the DIANA algorithm in OpenMP**
Hethini Ribeiro, Roberta Spolon, Renata Lobato, Aleardo Manacero
- 6. Research on Image Content Authentication Algorithm of Semi-fragile Watermarking for**

Adaptive Embedding Based on Characteristic of Image

Shan Yang, Liang Chen, De Li

7. Flash Animation Watermarking Algorithm Based on SWF Tag Attributes

YiAn Zuo, ZhiXun Zheng, De Li

8. Design and Implementation of a Novel SDN-based Architecture for Wi-Fi Networks

Lei Liu, Mingzheng Li, Lei Mei, Ye Tian

9. One-time Conference Protocol based on Location using Beacon

Jiyoung Lim, SangHyun Lim

12:00-13:00 Lunch break

13:00-13:30 Plenary Speaker I

(Chair: Kwang-il Hwang)

Empowering Cognitive Security Systems with Computational Intelligence & Granular Computing

Ph.D. Vincenzo Loia

Professor at University of Salerno

13:30-14:00 Keynote Speaker II

(Chair: Kwang-il Hwang)

Blockchain for Smart Communities: Opportunities and challenges

Ph.D. Neeraj Kumar

Professor at Thapar Institute of Engineering and Technology

14:00-14:10 Coffee break

14:10-15:30 Session A-3 : ICT Applications and Services

(HALL A)

(Chair: Wanhyun Cho)

1. Service Oriented Stock Information and Analysis System

Amjad Ahmed, Eunmi Choi

2. Application of Smart Water Grid Technology in Developing Countries Through Considering Korean SWG Experience

Gyewoon Choi, Hyoseon Park, Dongwoo Jang

3. **Background Modeling using PID Control and Machine Learning Technique**
HyungJun Kim
4. **Binary Code Analyzer for Integer Overflow Prevention**
Junho Joeng, Hyun Hu Shin, Hyun Oh Jung, YangSun Lee, Yunsik Son
5. **Concolic Unit Testing based on Fuzzy Logic for Function Dependency Evaluation**
MyeongHee Sohn, Junho Jeong, Yunsik Son
6. **Context-awareness information and QoE based system for improve CPS accuracy**
Aria Seo, Yeichang Kim
7. **Correlation Analysis System between Emotional state and Gait**
Jun Young Moon, Kwi-Bin Seo, Min Hong
8. **Customized Mobile Marketing Platform Design Utilizing IoT Based Beacon Sensor Devices**
Ji Hoon Seo, Jin Tak Choi
9. **Various Color Models and Color indexes to predict Fruit Ripeness Stages**
Wanhyun Cho, Myung Hwan Na, Sangkyoon Kim
10. **Design of active access control system by using NFC-based EAP-AKA protocol**
Young-Hwan Jang, Seung-Su Yang, Min-Hyung Park, Hyung-Joon Kim, Seok-Cheon Park
11. **Design of Image Detection System using Vertical-histogram-based Shadow Removal Algorithm**
Young-Hwan Jang, Seung-Su Yang, Min-Hyung Park, Hyung-Joon Kim, Seok-Cheon Park

14:10-15:30 Session B-3 : Workshop on IWFTS2018

(HALL B)

(Chair: Yoojae Won)

1. **Distributed price tracking and management system based on blockchain technology**
MinJae Yoo, YooJae Won
2. **Study On motor vehicle exhaust pollution (CO) control**
Weiwei Liu, Jin Wang
3. **Patch Integrity Verification Method Using Block Chain**
Yonggun Kim, Yoojae Won
4. **A Research on Common Behavior Analysis of Multiple Endpoints**
Jeonghoon Seo, Yoojae Won
5. **Analysis of user satisfaction with shared bicycles**
Xiaomei Xia, Huipeng jiang, Jing Wang
6. **Vulnerability Analysis Method in Android Binder Communication**
Gilsu Cho, Jaecheol Ryou,
7. **Character Recognition Based on Multi-modal Fusion**
Shiqi Lv, Jin Liu, Chao Yu, Yihe Yang, Jin Wang
8. **Is My Web Search Query Visible?**
Hyungyu Nam, Hyunsu Mun, Woosik Jung, Youngseok Lee
9. **A New Algorithm For Influence Maximization Problem Under Independent Cascade Model**
Wei Liu, Xin Chen, Ling Chen, Jin Wang, Bolun Chen
10. **Differential Privacy Protection Method for Location-based Mobile Marketing**
Chunyoung Yin, Xiaokang Ju, Jin Wang

14:10-15:30 Session C-3 : PDCAT 2018

(HALL C)

(Chair: Jong-Myon Kim)

- 1. Performance Comparison of Two Bloom Filter Construction Methods**
Chenxi Luo, Zhu Wang, Tiejian Luo
- 2. An Efficient Model and Algorithm for Privacy-preserving Trajectory Data Publishing**
Li Songyuan, Shen Hong, Sang Yingpeng
- 3. A Study of an Automated Software Effort Measurement Method**
Yeong-Seok Seo, Hyun-Soo Jang
- 4. A Fast Global AVF calculation Methodology for Multi-core Reliability Assessment**
Jiajia Jiao, Dezhi Han
- 5. What Makes Charitable Crowdfunding Projects Successful: A Research Based on Data Mining and Social Capital Theory**
Xizi Wang, Li Wang
- 6. A SwarmESB based architecture for an European Healthcare Insurance System in compliance with GDPR**
Cristina Georgiana Calancea, Lenuța Alboai
- 7. Blockchain and smart-contracts modeled in a SwarmESB ecosystem**
Ioana Stanescu, Lenuta Alboai
- 8. A Study on Deriving and Simulating Pre-risk on Complex Gas Facilities for Preventing Accidents**
JeongSeok Oh
- 9. An Optimized Regularization Method to Enhance Low-Resource MT**
Yatu Ji, Hongxu Hou, Ying Lei, Zhong Ren

15:30-15:40 Coffee break

15:40-17:00 Session A-4 : ICT Applications and Services

(HALL A)

(Chair: Kwangman Ko)

- 1. Text Detection Based on Semantic Segmentation**
Chao Yu, Jin Liu, Shiqi Lv, Yihe Yang, Jin Wang
- 2. MediGo: Internet of Things based Telemedicine System**
Jun-Yan Koay, Kennedy Ho, Yung-Wey Chong, Kwang-Man Ko
- 3. Study of Advanced Development Testing/Evaluating Methods about Security Functions based on Digital Printer**
Wook-Jae Cha, Hyeob Kim, Dongho Won, HyukJun Kwon
- 4. Gesture learning and recognition system using heterogeneous sensors for each body part**
Yong Jin, Jisun Park, Yulong Xi, Seoungjae Cho, Kaisi Huang, Yunsick Sung, Kyungeun Cho

5. **Rear-view Camera System for Improving Safety using Particle Filtering**
HyungJun Kim
6. **Korean Sentiment Word Processing and Opinion Mining Analysis Using Unstructured Data with Stock Information**
Ji Hoon Seo, Jin Tak Choi
7. **Module Design for Secure Communication between Telematics Systems and External Systems**
Kiyoung Jang, Byoungsoo Koh
8. **Performance Evaluations of Real-time Video Intrusion Detection Algorithm for Intelligent CCTV**
Kwang-il Hwang
9. **Openholo : Architecture Design of Open Source License Verification System for Copy Right Protection**
Tae-ho Lee, Byoung-soo Koh
10. **Pantograph Detection System using Image Processing and Machine Learning Techniques**
HyungJun Kim
11. **Scalable Media Service through adaptive Media Cache Server**
Kim Sang Hyong, Won Yoojae

15:40-17:00 Session B-4 : Workshop on Wellness 2018

(HALL B)

(Chair: Se Dong Min)

1. **A Performance Comparison of GPU and CPU for Deep Convolutional Neural Networks**
EunKwang Jeon, SangWook Han, HwaMin Lee
2. **Mesh Information Collector for Mesh Convergence Test on Finite Element Analysis**
Daeyong Jung, Myungil Kim, DaeWon Lee, Seung-Keun Park
3. **Fast parallel processing system using Multi GPU for Defogging in marine IT convergence environment**
Seong-Soo Han, You-Boo Jeon, Doo-Soon Park, Chang-Sung Jeong
4. **A Novel Algorithm for Identifying Essential Proteins in Dynamic PPI network**
Wei Liu, Liangyu Ma, Ling Chen, Jin Wang, Bolun Chen
5. **Mesh Decision Manager to Determine the Efficient Mesh Node and Element**
Daeyong Jung, Dongwoo Seo, Sangjin Park, DaeWon Lee, Hoyoon Kim
6. **An Improved Clustering Model for Privacy Protection of Multimedia Data**
Chunyoung Yin, Yuhang Zhu, Jin Wang
7. **A high-speed parallel processing system based on multi GPU for R*-tree range query processing**
Seong-Soo Han, You-Boo Jeon, JinSoo Park Park, Chang-Sung Jeong
8. **Design and Implementation of code for low power embedded system**
You-Boo Jeon, Byung-Joon Park, Seong-Soo Han
9. **Mesh Convergence Test of Uniformly and Adaptively Refined Mesh Models in Code-Aster**
Seung-Keun Park, Sukkeun Yi, DaeWon Lee, Daeyong Jung
10. **Feasibility Study of Developed Wearable Belt-type Capacitive Sensor for Apnea Monitoring**

Esubalew Belay, Young Kim, Jong Gab Ho, Changwon Wang, Se Dong Min

15:40-17:00 Session C-4 : PDCAT 2018

(HALL C)

(Chair: Yunsick Sung)

- 1. Dynamic Scheduling Algorithm based on Priority Assignment for Downlink LTE Networks**
Trabelsi Ala din, Marouane Hend, Zarai Faouzi
- 2. Analysis of massive e-learning Processes: an approach based on big association rules mining**
Asma Hassani, Sonia Ayachi Ghannouch
- 3. Body gesture modeling for psychology analysis in job interview based on deep Spatio-temporal approach**
intissar khalifa, ridha ejbali, mourad zaied
- 4. Autonomous Flight Control Method of Drones for Enforcement of Traffic Law Violation**
Jeonghoon Kwak, Sang-Geol Lee, Yunsick Sung

Day 3, Aug. 22, 2018 (Wednesday)

9:00-10:40 Session A-5 : Internet of Things

(HALL A)

(Chair HyungJun Kim)

- 1. Block-Chain Based Video Data Forgery Protection System**
Byung Wook Kwon, Jong Hyuk Park
- 2. Deep learning based object detection using OpenCV in Smart Homes**
Faisal Mehmood, DoHyeun Kim
- 3. Enjoying Minecraft with Wearable Devices**
Hyunsu Mun, Jiwon Min, Hyunho Lee, Youngseok Lee
- 4. Improved Indoor Positioning System using BLE Beacon**
JinSu Kang, Yoojae Won
- 5. Design and Implementation of IoT/WSP Node Registration and Discovery based on OCF IoTivity in IoT Networks**
Wenquan Jin, DoHyeun Kim
- 6. Advanced Group Key Management Scheme for Secure Smart Home Environment**
WonIk Son, Junho Jeong
- 7. A Generic Plug-and-Play IoT Platform Supporting Device Management Based on Semantics Web**
Woongsup Kim, Haram Ko, Hyeonjin Yun, Jiae Sung, Seeun Kim
- 8. A Data Driven Architecture For Cost Effective IoT Device Management Using Hopfield Network**
Woongsup Kim, Jiseong Nam, Jiyeon Kang, Chaehyun Kim
- 9. Architecture of Middleware System for Intelligent Factory Automation Based on Industrial**

Internet of Things

Yang Koo Lee, Seung-Jun Lee, Daesub Yoon

10. Free block allocation algorithm based on erase counts for flash memory wear-leveling

Yong Jin Jun, Tae Sun Chung

11. An IoT Virtual Machine Code Optimization Method using Native Code Translation

Yunsik Son, Junho Jeong, YangSun Lee

9:00-10:40 Session B-5 : Workshop on HRH 2018

(HALL B)

(Chair: Jun-Ho Huh)

1. Text Detection Based on Semantic Segmentation

Chao Yu, Jin Liu, Shiqi Lv, Yihe Yang, Jin Wang

2. Finding Lane Lines on the Road for Vehicle to Gird

Jeong-Ho Bak, Jun-Ho Huh

3. Chinese Question Classification Based On Deep Learning

Yihe Yang, Jin Liu, Shiqi Lv, Chao Yu, Jin Wang

4. An Optimization Theory of Home Occupants' Access Data for Determining Smart Grid Service

Seung-Mo Je, Jun-Ho Huh

5. Mobile marketing recommendation method based on user location feedback

Chunyoung Yin, Shilei Ding, Jin Wang

6. Time Value of Electric Power: Calculation of Spot Price and Option Value for Future Options Flow Using Python

Seung-Mo Je, Jun-Ho Huh

7. A Novel Essential Protein Identification Method by Integration of Network Topology and Multi-Source Biological Information

Wei Liu, Liangyu Ma, Ling Chen, Jin Wang, Bolun Chen

8. Improvement of Medical Imagery Data Submission Process Utilizing Hospital Medical Billing Portal Service of Health Insurance Review & Assessment Service

ChangYoung Kim, YoungMin Ko, JongMaeng Kim, Jun-Ho Huh

9. The Analysis of Monopolistic Competitive Behavior Simulated Shared Parking

Weiwei Liu, Jin Wang

10. Improvement of Operating System for Management of Examinee Computer Terminals and Test Administration/Supervision

JongMaeng Kim, YoungMin Ko, HongSub Kim, Jun-Ho Huh

9:00-10:40 Session C-5 : PDCAT 2018

(HALL C)

(Chair Jehn-Ruey Jiang)

1. Adaptive Control and Optimization on Dynamic Load Balancing Model

Tinglei Zhao, Jianzhong Qiao, Shukuan Lin, Yanhua Wang

2. Intraday Stock Price Prediction based on Deep Neural Network in H2O Deep learning Platform

Nagaraj Naik, Nagamma Patil

3. **PINUS: Indoor Weighted Centroid Localization with Crowdsourced Calibration**
Jehn-Ruey JIang, Hanas Subakti, Ching-Chih Chen, Kazuya Sakai
4. **Pipeline Patterns on top of Task-Based Runtimes**
Enes Bajrovic, Siegfried Benkner, Jiri Dokulil
5. **A Generic Approach for the Verification of Static and Dynamic Behavioral Properties of SCDL/WS-BPEL Service-Component Architectures**
Taouik Sakka Rouis, Mohamed Tahar Bhiri, Mourad Kmimech, Layth Sliman
6. **Pattern-based approaches for business process improvement: A literature review**
Nesrine Missaoui, Sonia Ayachi Ghanouchi
7. **A Development of Architecture for Risk Area Prediction System**
Ugwiyeon Lee, Jeongseok Oh
8. **CCloud Migration Approaches: Evaluation and Proposition**
Jaleleddine HAJLAOUI, Zaki BRAHMI
9. **Nursery Science: A Mobile Application for Learning Science for Pre-Schoolers**
Clifford Calleja, Paul John Candelaria, Dann Neil Cape, Ma. Katrina Lazarte, Bernie Fabito
10. **Fault Diagnosis of a Wireless Sensor Network using a Hybrid Method**
Farzin Piltan, Jong-Myon Kim

10:50-12:30 Session A-6 : Cloud Computing

(HALL A)

(Chair Jun-Ho Huh)

1. **Adaptive selection of dynamic Resource Scaling based on Fuzzy-AHP in Cloud Computing**
A-Young Son, Eui-Nam Huh
2. **System Access Control Technique for Secure Cloud Computing**
Eun-Gyeom Jang, Byoungsoo Koh
3. **3D Level-of-Detail Model Generation of Human Body for Virtual Reality Devices**
Koojoo Kwon, Woochan WI, Yeonjin Heo, Seongjun Lee, Jion Kim, Byeong-Seok Shin
4. **Security Mechanism for DDoS Detection in NFV**
HyunJin Kim, SeokHun Lee, JaeCheol Ryou
5. **Blockchain-based Database Security System in Edge Computing**
Kyung Yeob Park, Pradip Kumar Sharma, Jong Hyuk Park
6. **SDN-based Hybrid Virtual System in Cloud**
Nam Yong Kim, Jong Hyuk Park
7. **Metadata Log Management for Full Stripe Parity and Recovery for Flash Storage Systems**
Seung-Ho Lim
8. **Semi-supervised Learning based Malicious User Detection in Online Social Networks**
Shailendra Rathore, Pradip Kumar Sharma, Jong Hyuk Park
9. **Cloud Infra Design Tool Based on Metamodeling**
Wenxue Piao, Dugki Min
10. **Building pre-DTN cluster testbed utilizing cloud platform**
Wontaek Hong, Jeonghoon Moon, Ungmo Kim, Jinwook Chung

11. Design and Implementation of a NUMA-aware Volume Manager for Memory Bus-connected Storages

Yongseob Lee, Sungyong Park

10:50-12:30 Session B-6 : Workshop on ICC2018

(HALL A)

(Chair YangSun Lee)

- 1. An Adaptive Offloading Method for IoT-Cloud Virtual Machine System**
Yunsik Son, Junho Jeong, YangSun Lee
- 2. Risk Analysis of Taxi Fare Adjustment**
Xiangyu Xu, Xiaomei Xia, Jing Wang
- 3. A Study on IoT-Cloud Converged Virtual Machine System**
Yunsik Son, Junho Jeong, YangSun Lee
- 4. Design of one-time address system based on BlockChain for transparency and privacy of donation system**
JaeKyu Lee, JunHo Jeong
- 5. An Image Processing Based Infrared Camera System for Gas Detection**
HyungJun Kim
- 6. Evaluation of Coupling Coordination Degree Between Urban Rail Transit and Land Use**
Weiwei Liu, Jin Wang
- 7. Big Data Classification Model Method Using Smart Water Grid Based Water Resource Measurement Data**
Irfan Ajmal Khan, Ji Hoon Seo, Jin Tak Choi
- 8. Study on Decision Making Model for Improvement of Water Supply Systems Considering Economy**
Hyoung Geun Jo, Gye Woon Choi, Dong Woo Jang, Hyo Seon Park
- 9. Smart Fuzzing Method for Secure Web Applications**
Woohang Jang, Junho Jeong, Yunsik Son, Seman Oh
- 10. Multiple Vehicle Tracking System with Convolution Neural Networks**
HyungJun Kim

10:50-12:30 Session C-6 : PDCAT 2018

(HALL A)

(Chair Cheol Hong Kim)

- 1. A Study on L1 Data Cache Bypassing Methods for High-Performance GPUs**
Cong Thuan Do, Min Goo Moon, Jong Myon Kim, Cheol Hong Kim
- 2. Memory Contention Aware Power Management for High Performance GPUs**
Hong Jun Choi, Dong Oh Son, Cheol Hong Kim
- 3. Dynamic Selective Warp Scheduling for GPUs using L1 Data Cache Locality Information**
Gwang Bok Kim, Jong Myon Kim, Cheol Hong Kim

4. **Automatic Classification of Transformed Protocols Using Deep Learning**
Changmin Jeong, Mirim Ahn, Haengho Lee, Younggiu Jung
5. **Towards a Two Factor Authentication method using Zero-Knowledge Protocol in Online Banking Services**
Yichen Han
6. **Security Vulnerability Analysis of Wi-Fi Connection Hijacking on the Linux-based Robot Operating System for Drone Systems**
Jinyeong Kang, Inwhee Joe
7. **Cost-Performance Comparison of Various Accelerator Implementation Platforms for Deep Convolutional Neural Network**
Yechan Yu, Hojin Kim, Jinjoo Ha, Daewoo Kim, Kang Yi
8. **Covert Timing Channel Design for Uniprocessor Real-Time Systems**
Jaeheon Kwak, Jinkyu Lee
9. **A Prediction Method of Solar Power Generator using Machine Learning Techniques**
Jungseok cho, Jeongdoo Lee, Doosan Cho

Conference Venue



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The 19th International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT 2018)

