

## International Conference on Green and Human Information Technology ICGHIT2021 Program

| Time                         | Room A   | Room B              |
|------------------------------|--|---------------------|
| <b>Wednesday, January 13</b> |  |                     |
| 02:00 pm - 03:00 pm          | <i>Opening Ceremony &amp; Plenary Talk</i>             |                     |
| 03:00 pm - 03:15 pm          | <i>Coffee Break</i>                                    |                     |
| 03:15 pm - 03:30 pm          | <i>Session Preparation</i>                             |                     |
| 03:30 pm - 05:00 pm          | <b>CNS: Computer &amp; Network Security</b>            | <b>P1: Poster 1</b> |
| <b>Thursday, January 14</b>  |  |                     |
| 10:30 am - 12:00 pm          | <b>CIS: Control &amp; Intelligent System</b>           |                     |
| 12:00 pm - 01:00 pm          | <i>Lunch (Bring your own lunch)</i>                    |                     |
| 01:00 pm - 02:00 pm          | <i>Plenary Talk</i>                                    |                     |
| 02:00 pm - 02:15 pm          | <i>Coffee Break</i>                                    |                     |
| 02:15 pm - 02:30 pm          | <i>Session Preparation</i>                             |                     |
| 02:30 pm - 04:00 pm          | <b>MSP: Multimedia and Signal Processing</b>           | <b>P2: Poster 2</b> |
| 04:00 pm - 04:15 pm          | <i>Coffee Break</i>                                    |                     |
| 04:15 pm - 04:30 pm          | <i>Session Preparation</i>                             |                     |
| 04:30 pm - 06:00 pm          | <b>CSH: Communication &amp; IoT / SW&amp;HW Design</b> |                     |
| <b>Friday, January 15</b>    |  |                     |
| 10:30 am - 12:00 pm          | <b>BF: Birds of a Feather</b>                          |                     |

### Wednesday, January 13

**Wednesday, January 13 2:00 - 3:00**

**Opening Ceremony & Plenary Talk**

Rooms: Room A, Room B

**Wednesday, January 13 3:00 - 3:15**

**Coffee Break**

Rooms: Room A, Room B

**Wednesday, January 13 3:15 - 3:30**

**Session Preparation**

Rooms: Room A, Room B

**Wednesday, January 13 3:30 - 5:00**

**CNS: Computer & Network Security**

Room A

Chair: Byung-Seo Kim

**An Image-Based Proprietary Blockchain Framework for Logistic Systems**

Yiyang Cheng, Akihito Taya and Yoshito Tobe

**Efficient LWR-Based Signature Using Cyclotomic Trinomials**

Joo Woo, Suhri Kim and Jong Hwan Park

**Efficient Support of Online Privacy-Preserving Data Publishing in a Distributed Environment**

Su Mee Moon and Jong Wook Kim

**Blockchain-Based Medical Data Management System Using Proxy**

**Re-Encryption**

Shin-Ok Lee, Kwangman Ko and Young-Hoon Park

**Practical Group Signature with Pairing-Batch Verifications and Fast Openings**

Youngkyung Lee, Hyoseung Kim and Jong Hwan Park

**Exploiting Multi-Hop Transmission to Enhance PHY-Security in Underlay**

**Cognitive Radio Networks**

Kyusung Shim and Beongku An

## P1: Poster 1

Room B

Chair: Kyutae Lee

**Promoting Trend of IoT-Based P2P Power Trading and Energy New Industry Profit Model**

Se-Hwan Park

**Development of Cybersecurity Technology and System Based on Quantum Computing**

Kyungkyu Ko, Jeongha Kim, Junghee Han and Eun-Sung Jung

**Study on FTN(Fault Tolerant Network) Technology to Polar Big Data Connected to Daily Domains**

Sun-Ho Yum, Jinyoung Lee, Svetlana Balkashina, Soo-Young Shin and Soo-Hyun Park

**Analysis and Design Android Based Membership Information Systems of Indonesian Hindu Youth Association (Peradah)**

I Made Sugi Ardana

**Monitor System of Optimized Power Management with Indoor Sensor**

Ye Wang, Kyutae Lee and Sehrish Malik

**Performance Comparison of Single Model and Ensemble Model in Automatic Classification of Patent Documents Using Deep Learning**

Sunghoon Kim, Seungcheon Kim and Moonsik Kang

Thursday, January 14

Thursday, January 14 10:30 - 12:00

**CIS: Control & Intelligent System**

Room A

**Automatic Category Labeling Method of Electronic Medical Records**

Hyo Seon Kim, Sang Hoon Hong, Ein-Jeong Hwang, Jeung Sun Lee and Yong-Gyu Jung

**Weight Balance in Regular Polygons for Drone Stability**

Seongbae Eun, Jinman Jung, Taehyun Kim, Young-Sun Yun and Sun-Sup So

**Performance of Optimal Energy Control Optimization in Smart Homes Environment**

Sehrish Malik, Kyutae Lee and Jang-Geun Ki

**Energy Prediction Mechanism in Smart Homes Environment**

Kyutae Lee, Sehrish Malik, Moonsik Kang, Nam Sang-Yep, HyunChang Lee and DoHyeun Kim

**Deeplearning Edge Based Blockchain Platform for Smart Factory Production Quality Monitoring and Tracing**

Ashiquzzaman Akm, Jinsul Kim, Seungmin Oh, Dongsu Lee, Kwangki Kim and Yeonggwang Kim

**Real Emotion Understanding Model Based on ML for Human Psychological Behaviour Analysis**

DoHyeun Kim, Faisal Jamil, Naeem Iqbal, KyungNam Park, HeeDong Park and Anh Ngoc Le

**Evaluation of Additive Power of Two Quantization on Various Deep Learning Datasets**

Rozi Khan, Ahmed Mujtaba, Wai Kong Lee and Seong Oun Hwang

**Thursday, January 14 12:00 - 1:00**

**Lunch (Bring your own lunch)**

Rooms: Room A, Room B

**Thursday, January 14 1:00 - 2:00**

**Plenary Talk**

Rooms: Room A, Room B

**Thursday, January 14 2:00 - 2:15**

**Coffee Break**

Rooms: Room A, Room B

**Thursday, January 14 2:15 - 2:30**

**Session Preparation**

Rooms: Room A, Room B

**Thursday, January 14 2:30 - 4:00**

**MSP: Multimedia and Signal Processing**

Room A

Chair: Moonsik Kang

**The Unsupervised Denoising Image Filter Based on Recursive Deep Network Structure**

Changhee Kang and Sang-ug Kang

**Context-Aware Network Execution Using Dynamic Block-Sharing Residual Networks**

Truong Thanh Hien and Truong Nguyen

**Development of Multi-Level Deep Learning Tool and Smart Signal Recognition Tool**

JaeGap Lee and KwangSeok Hong

## P2: Poster

Room B

### **Development of a Transformable Wheelchair Robot for Care Service to Physically Vulnerable People**

Jeong Hak Lim, Sung Min Ma, Kyoung Ho Kim, Hye Yeon Ryu, Young Jin Lee, Chang Hyung Park, Young Lim Choi, Ahyeon Kim, Sujin Baek and Jong-Wook Kim

### **Intelligent Stretch Reduction in Information-Centric Networking Towards 5G-Tactile Internet Realization**

Hussain Ahmad, Muhammad Zubair Islam, Amir Haider, Rashid Ali and Hyung Seok Kim

### **Total Internal Reflection Based Particulate Matters Detection Using Smartphone**

Haechang Yang, Sanghoon Shin, Seungmin Myeong, Dongmin Seo, Sangwoo Oh and Sungkyu Seo

### **Quality Monitoring Method Using Machine Learning for Resistance Spot Welding**

Tin Tran Trung, Joon-Ik Son, Hee-Dong Jang, Seong-Uk Lee, Anh Quang Vu Nguyen and Jong-Wook Kim

### **3D Instance Segmentation and Separation from Background on RGB-D Using Deep Learning**

Hyunsik Ahn

### **Human Sentiments and Related Physical Activities Detection in Disasters Based on Deep Learning**

Muhammad Sadiq Amin, Huynsik Ahn and Young-Bok Choi

**Thursday, January 14 4:00 - 4:15**

### **Coffee Break**

Rooms: Room A, Room B

**Thursday, January 14 4:15 - 4:30**

### **Session Preparation**

Rooms: Room A, Room B

**Thursday, January 14 4:30 - 6:00**

**CSH: Communication & IoT / SW&HW Design**

Room A

**A Study on Sensing Behavior in UMap**

Koichi Shimoda, Takuya Masuda, Yoshito Tobe, Akihito Taya and Junji Takahashi

**Underwater Network Management System for M-WASN**

Delphin Raj

**A Fog Computing Based Platform Using Fog Layer Module**

Muhammad Muneeb, Kwangman Ko and Young-Hoon Park

**Analysis of Acoustic Feature Extraction Techniques for Machine Sound**

Jason Jing Wei Lim, Boon Yaik Ooi, Wai Khuen Cheng and Soung Yue Liew

**Integrating Information-Centric Wireless Sensor Network to the Internet: A Softwarized Approach**

Muhammad Atif Ur Rehman, Muhammad Salah Ud Din, Sana Fayyaz, Hyun-Doo Jin and Byung-Seo Kim

**PEN-WSN: Power Efficient Named Data Networking Enabled Cluster Based WSN**

Muhammad Salah Ud Din, Muhammad Atif Ur Rehman, Sana Fayyaz, Hyun-Doo Jin and Byung-Seo Kim

**Effects of Modulated Waveform on RF Energy Harvesting**

Linh Thuy Nguyen, Luong Duy Manh and Ishibashi Koichiro

**Friday, January 15**

**Friday, January 15 10:30 - 12:00**

**BF: Birds of a Feather**

Rooms: Room A, Room B