KICS
Winter Conference 2022

Date Feb. 9 (Wed) ~ 11 (Fri), 2022

Venue Alpensia Resort, Pyeongchang, Gangwon Province

Organized by KICS
The Korean Institute of Communications and Information Sciences

Patrons
SAMSUNG LG Electronics SK telecom LG U+
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KICS
The Korean Institute of Communications and Information Sciences

conference.kics.or.kr

SK텔레콤의 AI 서비스가 새로운 생활을 만듭니다

우리 가족을 알아보고 지켜주는 집과
당신의 목소리 하나로 시작되는 서비스

누군가에겐 자신을 먼저 챙겨주는 가족이자
누군가에겐 다정한 친구이고 말벗

내 취향을 기억하고 추천해 주는 플랫폼부터
필요로 하기 전에 알아서 돕는 기술까지

모든 순간 AI가 함께 하는
새로운 생활이 시작됩니다.

더 나은 모두의 생활을 위해
SK텔레콤은 당신 가까이에서 언제나 함께하겠습니다

KICS Winter Conference 2022 Program

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Message from the Chairs

Dear KICS members,

The new year 2022 has come. Although the COVID-19 pandemic is still continuing now, we sincerely hope that this year, we will overcome this pandemic and recover our daily happiness.

While we are still far from the pre-COVID period, we invite you to the KICS Winter Conference 2022 in renowned Alpensia Resort, Pyeongchang. This winter conference, held both online and offline, will proceed safely in compliance with the government's COVID-19 guidelines and will provide the best opportunities for academic exchanges and social networks.

First of all, as a keynote, we will have "Design your perspective" by PYH Co. CEO Yong-hu Park. We will also invite Prof. Robert W. Heath, Jr. from NCSU to have his lecture on "Going forward with MIMO communication." Four tutorials on the latest ICT technologies, five presentations of young researchers, and around 30 special sessions are also prepared. In particular, at this conference there will be a special poster session at 'Gather town' platform for at which you can experience the latest ICT research trends for the metaverse. It should be a good opportunity to find out new technologies made possible due to the advancement of technologies of 5G/6G, together with the recent interests in the metaverse.

The success of the KICS Winter Conference 2022 depends on the active participation of our members. At this conference, all participants are encouraged to discuss various academic programs in real-time, and the recorded content will also be provided during and even after the conference. By communicating both online and offline, we believe the KICS Winter Conference 2022 will be a lively and passionate place to exchange new ideas.

Lastly, we would like to express our gratitude to the organizers of the organizing committee and the secretariat of the society for their hard work in preparing this year's winter conference.

Best wishes.

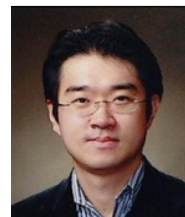February 2022

Yoan Shin
KICS President

Jaehyun Kim
Organizing
Committee Chair

Oh-Soon Shin
Technical Program
Committee Chair

Chan-Byoung Chae
Technical Program
Committee Chair

Sang-Hyo Kim
Technical Program
Committee Chair

Committees

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Dong Ku Kim (Yonsei University)   Dong-Seong Kim (Kumoh National Institute of Technology)
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Younghan Kim (Soongsil University)   Ji-Woong Choi (DGIST)
Jong Won Kim(GIST)   Dong Seog Han (Kyungpook National University)
Jeong Yeon Man (Gangneung-Wonju National University)   Jun Heo (Korea University)
Won Hyuk Lee (KISTI)

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Chair

Jaehyun Kim (Ajou University)

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Jae Seung Song (Sejong University)   Ji-Woong Choi (DGIST)
Dong-Seong Kim (Kumoh National Institute of Technology)

Registration

◼ Registration Fee

			Early Birds	On-Site	Note
Conference Registration	Member	Student	160,000 KRW	210,000 KRW	Reception coupon is not included
		Regular/Life	240,000 KRW	280,000 KRW	
	Non-member	Student	190,000 KRW	240,000 KRW	Reception coupon is not included
		Regular	300,000 KRW	340,000 KRW	
Undergraduate Student			60,000 KRW	80,000 KRW	
Tutorial Registration			Same as conference registration		

◼ Registration Policy

1. To be published in the KICS Winter Conference 2022 Proceedings, a minimum of one author from each accepted paper MUST register and be a KICS member, and the paper must be presented at the conference.
2. A valid student ID is required at the registration desk to check the eligibility for student-rate registration.
3. Registrations include access to conference sessions, a program book, souvenirs, a luncheon (Feb. 10), Banquet(Feb. 9) and coffee breaks.
4. Non-refundable author registration fees must be paid prior to the early registration due. (Feb. 2.)
5. For non-author registrations, absolutely no cancellations/refunds will be accepted after the early registration due. (Feb. 2.)

Registration

■ Method of Payment

* Card
  – Visa, Master, and JCB are available to use for online registration.
  – Payment by credit card is available through the online procedure.
  – All service charges on credit card are to be paid by registrants.
  – Actual debit amount is subject to change according the exchange rate.

* Bank Transfer
  – All bank remittance charges are to be paid by registrants.
  – Sender's name should be the registrant's name.

Bank Name	WOORI BANK
Account No.	1006-700-044564
Swift Code	HVBKKRSE
Bank Address	1-203, Hoehyeon-dong, Jung-gu, Seoul, Korea
Beneficiary	The Korean Institute of Communications and Information Sciences (KICS)
Beneficiary Address	#1504, 42, Seocho-daero 78-gil, Seocho-gu, Seoul 06626, Korea
Beneficiary TEL	+82-2-3453-5555

■ Refund Policy

If you have already registered for KICS Winter Conference 2022 and find that you are unable to attend or cancel the paper, please notify KICS Winter Conference 2022 secretariat in writing to conf2@kics.or.kr to request a refund and cancel your registration. Refund will be made upon receipt of this written notice after the conference. All bank service charges are to be paid by the registrant. No cancellations/refunds will be accepted after the early registration due (Feb. 02, 2022).

If you have any questions, please contact Registration Secretariat of KICS Winter Conference 2022 at conf2@kics.or.kr

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Post Conference

KICS Winter Conference 2022 publishes published papers at the Post-Conference of the Electronic Information Research and Information Center for sharing research information and communicating, and operates a bulletin board to enable questions and answers related to theses. (Real time and always operating)
▶ Post-Conference : http://www.eiric.or.kr/

Program at a Glance

	Oral Session : February 9 (Wednesday)							
Venue / Time	Pyeongchang Hall 1	Pyeongchang Hall 2	Pyeongchang Hall 3	Daegwallyeong 2	Luge Hall	Grand Ballroom1 (Forest)	Grand Ballroom 2 (Lake)	Auditorium
	1A	2A	3A	4A	5A	6A	7A	8A
13:00 - 14:40 (100min)	초지능 통신 컴퓨팅 융합 기술 좌장 : 강준혁 (KAIST)	IoT 응용 연구회 I 좌장 : 최성곤 (충북대학교)	인공지능 소사이어티 특별세션 1 좌장 : 한동석 (경북대학교)	무선통신 좌장 : 신원재 (아주대학교)	초신뢰양자 인터넷 ITRC 좌장 : 노광석 (고려대학교)	튜토리얼 좌장 : 손일수 (서울과학기술대학교)	이동통신 좌장 : 김준수 (한국산업기술대학교)	해동우수논문 좌장 : 김상효 (성균관대학교)
	1B	2B	3B	4B	5B		7B	8B
14:50 - 16:30 (100min)	부호 및 정보이론 연구회 좌장 : 최지웅 (DIGIST)	IoT 응용 연구회 II 좌장 : 최원석 (충북대학교)	인공지능 소사이어티 특별세션 2 좌장 : 이규만 (건양대학교)	지부장 워크숍 (비공개)	양자통신연구회 특별세션 좌장 : 허준 (고려대학교)		지능형 6G 이동통신 좌장 : 신원재 (아주대학교)	KREONET 특별세션 좌장 : 이원혁 (한국과학기술정보연구원)
17:20 - 18:50 (90min)	Reception & Keynote Speech Grand Ballroom							

Program at a Glance

	Pyeongchang Hall 1	Pyeongchang Hall 2	Pyeongchang Hall 3	Daegwallyeong 2	Luge Hall	Grand Ballroom1 (Forest)	Grand Ballroom 2 (Lake)	Auditorium
Oral Session : February 10 (Thursday)								
Venue / Time	Pyeongchang Hall 1	Pyeongchang Hall 2	Pyeongchang Hall 3	Daegwallyeong 2	Luge Hall	Grand Ballroom1 (Forest)	Grand Ballroom 2 (Lake)	Auditorium
	9A	10A	11A	12A	13A	14A	15A	16A
08:30 – 09:50 (80min)	레이더 융합 좌장 : 이창기 (한화시스템)	블록체인 소사이어티 1 좌장 : 김기형 (아주대학교)	Grand ICT 금오공대 ICT융합특성화 좌장 : 이재민 (금오공과대학교)	ICT 전략 1 좌장 : 김경배 (서원대학교), 정연만 (강릉원주대학교)	English Paper 1 Chair : Intae Hwang (Chonnam National University)	튜토리얼 좌장 : 이종호 (숭실대학교)	해외석학 특별강연 좌장 : 채찬병 (연세대학교)	5G 포럼 좌장 : 김동구 (연세대학교)
	9B	10B	11B	12B	13B		15B	
10:00 – 11:20 (80min)	오픈소스 시스템 좌장 : 김종원 (광주과학기술원)	블록체인 소사이어티 2 좌장 : 김기형 (아주대학교)	마이크로파 및 전파전파 연구회 특별세션 좌장 : 강승택 (인천대학교)	ICT 전략 2 좌장 : 이우용 (한국전자통신연구원), 조동욱 (충북도립대학교)	English Paper 2 Chair : Sooyoung Shin (Kumoh National Institute of Technology)		통신네트워크 소사이어티 1 좌장 : 김규헌 (경희대학교)	
11:20 – 12:30 (70min)	점 심 (썬큰가든/ 가든테라스)							
	9C	10C	11C	12C	13C	14C	15C	16C
12:30 – 13:50 (80min)	에너지 소사이어티 특별세션 (에너지 디지털 전환) 좌장 : 박완기 (한국전자통신연구원)	이동통신 소사이어티1 좌장 : 최영준 (아주대학교)	광대역 고감도 균일 디지털 합성빔 기술 1 좌장 : 김연우 (큐니온)	ICT 전략 3 좌장 : 박준구 (경북대학교)	English Paper 3 Chair : Junghoon Noh (Kumoh National Institute of Technology)	삼성전자 미래기술융합센터 좌장 : 신오순 (숭실대학교)	산학연 통신 및 서비스 기술 특별세션 좌장 : 강신각 (한국전자통신연구원)	합동세션 (경희대) 융합미래통신 (BK21) 및 차세대 이동통신 (ITRC) 1 좌장 : 정해준 (경희대학교)
	9D	10D	11D	12D	13D	14D	15D	16D
14:00 – 15:20 (80min)	IT융합산업체 특별세션1 좌장 : 유명식 (숭실대학교)	이동통신 소사이어티2 좌장 : 최준원 (한양대학교)	광대역 고감도 균일 디지털 합성빔 기술 2 좌장 : 김연우 (큐니온)	ICT 전략 4 좌장 : 이동명 (동명대학교), 정연호 (부경대학교)	English Paper 4 Chair: Kyungtae Kang (Hanyang University)	신진연구자 좌장 : 양현종 (포항공과대학교)	POST MAC 좌장 : 김성륜 (연세대학교)	합동세션 (경희대) 융합미래통신 (BK21) 및 차세대 이동통신 (ITRC) 2 좌장 : Junaid ur Rehman (경희대학교)
	9E	10E	11E	12E	13E		15E	16E
15:30 – 16:50 (80min)	IT융합산업체 특별세션 2 좌장 : 박민호 (숭실대학교)	인터넷 인프라기술 좌장 : 정윤원 (숭실대학교)	민·군 ICT융합 연구회 1 좌장 : 신수용 (금오공과대학교)	ICT 전략 5 좌장 : 조주필 (전북대학교)	English Paper 5 Chair : Jung Hoon Lee (Hankuk University of Foreign Studies)		POST MIMO 좌장 : 채찬병 (연세대학교)	합동세션 (경희대) 융합미래통신 (BK21) 및 차세대 이동통신 (ITRC) 3 좌장 : 김상혁 (경희대학교)
	9F	10F	11F	12F	13F		15F	16F
17:00 – 18:20 (80min)	ICT정책 좌장 : 전광호 (정보통신기획평가원)	네트워크응용 좌장 : 김기형 (아주대학교)	민·군 ICT융합 연구회 2 좌장 : 김동완 (동아대학교)	소방청 특별세션 (비공개)	English Paper 6 Chair : Hyunhee Park (Myungji University)		사물인터넷 좌장 : 이종훈 (대구경북과학기술원)	합동세션 (경희대) 융합미래통신 (BK21) 및 차세대 이동통신 (ITRC) 4 좌장 : Junaid ur Rehman (경희대학교)

Program at a Glance

Poster Session : February 10 (Thursday)

Venue / Time		Online Video
08:30 – 09:50 (80min)	17A	통신이론 및 시스템 좌장 : 이동명(동명대학교), 천상훈(인천재능대학교), 안정근(경북대학교)
10:00 – 11:20 (80min)	17B	메타버스 기반 포스터세션 좌장 : 김상효(성균관대학교), 한연희(한국기술교육대학교), 황인태(전남대학교), 임승찬(한경대학교), 박정훈(경북대학교)
11:30 – 12:30 (60min)	17C	무선통신 좌장 : 정연호(부경대학교), 최세영(원광대학교)
12:30 – 13:50 (80min)	17D	ICT 융합 기술 및 정책 좌장 : 이재진(숭실대학교), 이성진(동서울대학교), 이헌철(금오공과대학교), 이우용(한국전자통신연구원)
14:00 – 15:20 (80min)	17E	네트워크 및 서비스 좌장 : 박수현(국민대학교), 김병룡((주)효성)
15:30 – 16:50 (80min)	17F	학부논문 좌장 : 김덕경(인하대학교), 박대영(인하대학교), 정해준(경희대학교), 김수민(한국산업기술대학교), 방인규(한밭대학교)

Oral Session : February 11 (Friday)

Venue / Time	Pyeongchang Hall 1	Pyeongchang Hall 2	Pyeongchang Hall 3	Daegwallyeong 2	Luge Hall	Grand Ballroom1 (Forest)	Grand Ballroom 2 (Lake)	Auditorium
	18A	19A	20A	21A	22A	23A	24A	
08:30 – 09:50 (80min)	에너지ICT융합 좌장 : 최민석 (제주대학교)	위성 및 무인비행체 통신 좌장 : 박부식 (한국전자기술연구원)	인공지능통신 좌장 : 김상철 (국민대학교)	정보보호 좌장 : 최윤호 (부산대학교)	의료/바이오ICT융합 좌장 : 윤기철 (가천대길병원)	인공지능 좌장 : 이승익 (한국전자통신연구원)	ICT융합I 좌장 : 장희선 (평택대학교)	
	18B	19B	20B	21B	22B	23B	24B	
10:00 – 11:20 (80min)	통신네트워크 소사이어티 좌장 : 신석주 (조선대학교)	ICT융합II 좌장 : 손아영 (차세대융합기술연구원)	다중안테나통신 좌장 : 정방철 (충남대학교)	차량ICT융합 좌장 : 이신재 (한국과학기술원)	언어/음성신호처리I 좌장 : 김민중 (국가수리과학연구소)	인공지능응용 좌장 : 신원용 (연세대학교)	블록체인 좌장 : 이병주 (금오공과대학교)	아이디어 경진대회
	18C	19C	20C	21C	22C	23C	24C	
11:30 – 12:50 (80min)	스마트팩토리/스마트팜 좌장 : 최진철 (한국전자통신연구원)	ICT융합 III 좌장 : 이재진 (숭실대학교)	무선측위기술 좌장 : 김정곤 (한국산업기술대학교)	V2X통신 좌장 : 송용수 (한국철도기술연구원)	언어/음성신호처리II 좌장 : 정한민 (한국과학기술정보연구원)	영상인식 좌장 : 김은이 (건국대학교)		

Oral Sessions February 10 (Thursday)

13A English Paper Session 1

Chair : Intae Hwang(Chonnam National University)　　　Date: February 10 (Thursday) / 08:30~09:50 / Luge Hall

13A-1　A Study of Rainfall Impacts on Terahertz Wireless Communication Systems
Feyisa Debo Diba,Sungoh Kwon(University of Ulsan)

13A-2　5G-NR Link Level Performance Analysis under 3GPP-NR-NTN Channel Models
Chaitali J. Pawase,KyungHi Chang(Inha University)

13A-3　Machine Learning in 6G-NTN Emerging Technologies and Opportunities
Mohammad Sajid Shahriar,Chaitali J. Pawase,장경희(Inha University)

13A-4　Energy Efficient Design for the IRS-UAV Enabled Downlink Systems
Jiao Wu,Yiying Liu,Anho Lee,Yongsuk Byun ,Byonghyo Shim(Seoul National University)

13A-5　Hybrid NOMA and User Pairing for Massive Internet of Things
Muneeb Ahmad,Muhammad Sajid Sarwar,,Soo Young Shin(Kumoh National Institute of Technology)

13A-6　Intelligent Traffic Control Using 5G-NR-V2X
Arati Kale,안상훈,Chaitali Jagannath Pawase,장경희(Inha University)

13A-7　Differential Evolution with Adaptive Population Size for Target Localization in WSN
Lismer Andres Caceres-Najarro,*Iickho Song,Kiseon Kim(광주과학기술원,*한국과학기술원)

13A-8　Study of Multi-Link Device with Power Save Mode in IEEE 802.11be
Yelin Yoon, Jongyeon Park, and Saewoong Bahk(Seoul National University)

13B English Paper 2

Chair : Sooyoung Shin(Kumoh National Institute of Technology)　　　Date: February 10 (Thursday) / 10:00~11:20 / Luge Hall

13B-1　Performance comparison of deep learning model-based channel estimation and signal detection for OFDM systems
치고지,안젤라,임완수(Kumoh National Institute of Technology)

13B-2　User Pairing for NOMA-assisted Cell-free Massive MIMO System
Xuan-Toan Dang, Oh-Soon Shin(Soongsil University)

13B-3　Deep Learning Based Multiple Intelligent Reflecting Surface for MIMO-OFDM System
Md Habibur Rahman, Beom-Sik Shin, Binh Thanh Nguyen, Seung-Geun Yoo, Hyoung-Kyu Song(Sejong University)

13B-4　Cuckoo Search based- Scheme for Power Minimization in a Green SWIPT NOMA System
Carla Estefania Garcia, Mario Rodrigo Camana, Insoo Koo(University of Ulsan)

13B-5　Energy Efficient Routing Protocols for UWSN: A Survey
Iftekharul Islam Shovon, Seokjoo Shin(Chosun University)

13B-6　High-Accuracy Positioning in 5G-NR: Is carrier phase the answer?
Muhammad Tabish Niaz, Sunwoo Kim(Hanyang University)

Oral Sessions February 10 (Thursday)

13B-7 An Improved Particle swarm optimization Algorithm for complex nonlinear Problems
Haris Muhammad, Haewoon Nam, Jiyeon Park, Jun Hur(Hanyang University)

13B-8 Power Minimization in a MISO NOMA SWIPT System Assisted by a Power Beacon
Mario Rodrigo Camana, Carla Estefania Garcia, Insoo Koo(University of Ulsan)

13C English Paper 3

Chair : Junghoon Noh(Kumoh National Institute of Technology)   Date: February 10 (Thursday) / 12:30~13:50 / Luge Hall

13C-1 Multi-access Edge Computing for Next Generation Wireless Networks: Key Issues and Research Directions
Yemane Teklay Seyoum, Syed Maaz Shahid, Sungoh Kwon(University of Ulsan)

13C-3 Situational Awareness Acquisition for 5G mmWave V2X Communications: A Brief Review
Igbafe Orikumhi, Sunwoo Kim(Hanyang University)

13C-4 A Comparative Analysis on Machine Learning based Intelligent Forwarding Schemes in VNDN
Ayesha Siddiqa, Muhammad Toaha Raza Khan, Md. Mahmudul Islam, Muhammad Ashar Tariq, Malik Saad, Dongkyun Kim(Kyungpook National University)

13C-5 Euclidean Distance-based Machine Learning Scheme to Detect Vehicle Hacking Cyber-Attacks
Saeed Ahmed, Anila Kousar, Noor Gul*, Junsu Kim**, Su Min Kim**
(Mirpur University of Science and Technology, University of Peshawar & Korea Polytechnic University*, Korea Polytechnic University**)

13C-6 Comparison of Machine Learning-Based Anomaly Detection Schemes for CAN Bus Networks
Narayan Khatri, Abdul Mateen Abdul*, Seung Yeob Nam
(Yeungnam University, Federal Urdu University of Arts, Science & Technology Islamabad Pakistan & International Islamic University Islamabad Pakistan*)

13C-7 Collision-free Trajectory Planning for Cooperative Control of Multiple Vehicles based Proximal ADMM
Binh Thanh Nguyen, Ji-Hye Oh, Seung-Geun Yoo, Min-A Kim, Md Habibur Rahman, Hyoung-Kyu Song
(Sejong University)

13C-8 Privacy Preservation in IoT systems via Blockchains: A Brief Review
Naqqash Dilshad, Kelvin Dushime, JaeSeung Song(Sejong University)

13D English Paper 4

Chair : Kyungtae Kang(Hanyang University)   Date: February 10 (Thursday) / 14:00~15:20 / Luge Hall

13D-1 MIMIC 데이터베이스를 사용한 Deep Neural Network 기반 당뇨병 예측
왕격(Wang Ge),조인휘(Hanyang University)

13D-2 딥러닝을 이용한 뇌 자기공명영상에서의 혈관주위공간 분할 기술 연구
강신원,*양이화,**문원진,**문연실,***김희진,김재훈(삼성서울병원,*성균관대학교,**건국대학교병원,***한양대학교의료원)

13D-3 A Smart Trash Bucket with Sensor-Based Monitoring Capability for Clean Environments
정현아,김민재,이지섭,정재훈(성균관대학교)

13D-4   Box Stacker Solution for Loading Process Using Deep Reinforcement Learning
Murdivien Shokhikha Amalana,김국진,이상윤,엄주명(경희대학교)

13D-5   Deep learning based SOC estimation for Hybrid Energy Storage System
아딥,안제라,임완수(Kumoh National Institute of Technology)

13D-6   Edge AI based Hybrid Energy Management Systems
헤나르,다니,안젤라,임완수(Kumoh National Institute of Technology)

13D-7   Development of Ultracapacitor Management System Controller for Solar-Powered Streetlamp
다니,헤나르,안젤라,임완수(Kumoh National Institute of Technology)

13E English Paper 5

Chair : Jung Hoon Lee(Hankuk University of Foreign Studies)   Date: February 10 (Thursday) / 15:30~16:50 / Luge Hall

13E-1   Analysis of Process Mining in The Scientific Research and Community Service (PPM) Menu of Telkom University Portal
Siti Nihayatul Choiriyah, Rachmadita Andreswari, Rokhman Fauzi(Telkom University)

13E-2   Evaluation and Redesign of Semester Learning Plan to Improve the Effectiveness Business Process (Case Study: Telkom University)
Titok Aji Cakra, Rokhman Fauzi, Rachmadita Andreswari(Telkom University)

13E-3   Kubernetes Microservices Migration with Deep Reinforcement Learning
Minh-Ngoc Tran, younghan Kim(Soongsil University)

13E-4   Semi-Supervised Learning Using Data Between Real and Noise
Marcella Astrid, Muhammad Zaigham Zaheer, Seung-Ik Lee*
(University of Science and Technology, Electronics and Telecommunications Research Institute*)

13E-5   Image Steganography Based on Pyramid Pooling Module
Wei Bingxin, Duan Xintao*, Haewoon Nam(Hanyang University, Henan Normal University*)

13E-6   A Pixel-based Encryption Method for Privacy- Preserving Deep Learning Models
Ijaz Ahmad, Seokjoo Shin(Chosun University)

13E-7   A Machine-Learning-Driven Multi-Objective Optimization for IBN-Based Orchestration
Talha Ahmed Khan, Khizar Abbas, Afaq Muhammad, Wang-Cheol Song(Jeju National University)

13E-8   Incidence of Feature Processing Techniques for Machine Learning-based Breast Cancer Detection
Carla Estefania Garcia(University of Ulsan)

Oral Sessions February 10 (Thursday)

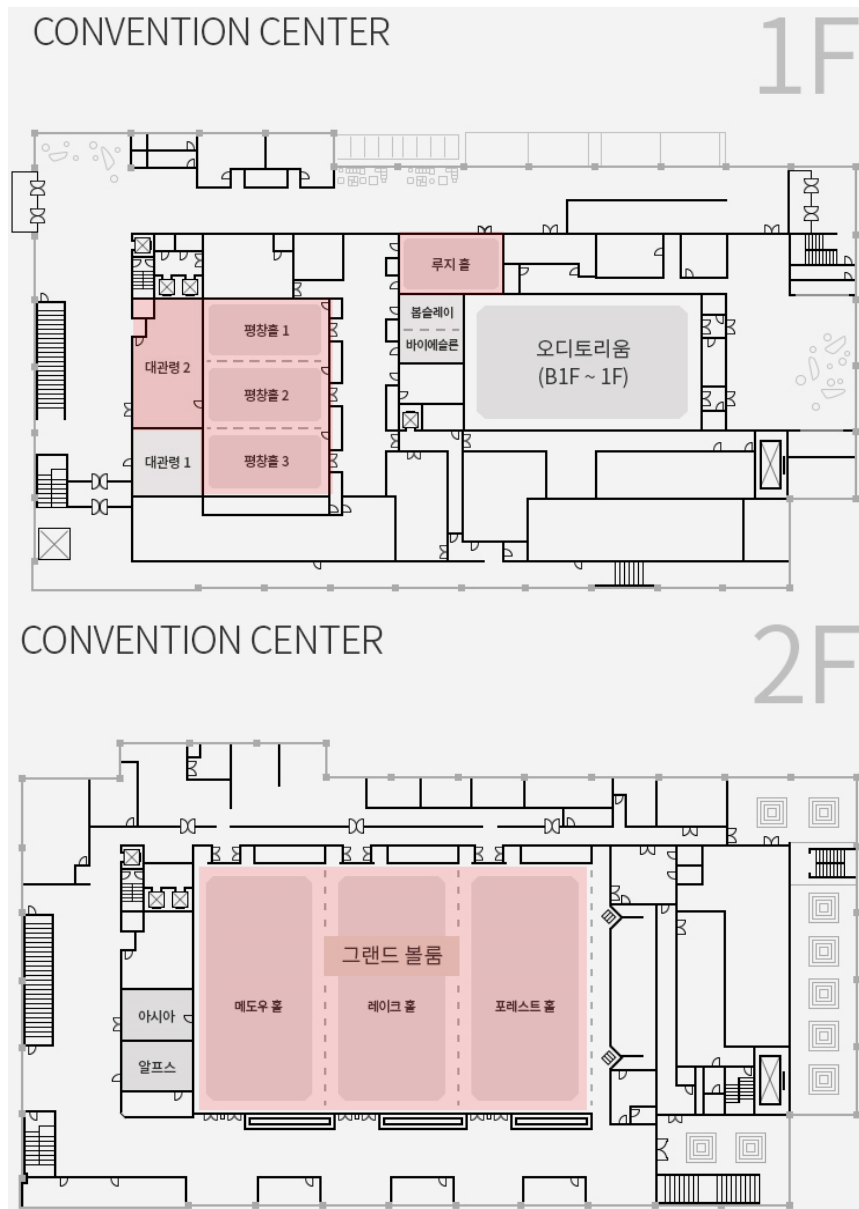## 13F English Paper 6

Chair : Hyunhee Park(Myungji University)　　　　　　　Date: February 10 (Thursday) / 17:00~18:20 / Luge Hall

13F-1 Indoor Visual Odometry and Visual SLAM with Seamless Positioning for UAV Navigation
Muhammad Wicaksono,Soo Young Shin(Kumoh National Institute of Technology)

13F-2 UAV-based Property Size Estimation and Storage System using Blockchain
Md Masuduzzaman,Soo Young Shin(Kumoh National Institute of Technology)

13F-3 구조가 알려져있지 않은 네트워크에서의 탐색 학습을 통한 커뮤니티 탐지
Yu Hou,*Cong Tran,Won-Yong Shin(연세대학교,*Posts and Telecommunications Institute of Technology)

13F-4 무선센서 네트워크에서 DBSCAN 알고리즘을 이용한 멀티 디바이스-프리 타겟 측위에 관한 연구
Chao Sun,이정표,박경은,Shangyi Yang,김영억(광운대학교)

13F-5 Query Processing Framework for Blockchain
Abdul Mateen Abdul, Narayan Khatri*, Seung Yeob Nam*(Federal Urdu University of Arts, Science & Technology Islamabad Pakistan & International Islamic University Islamabad Pakistan, Yeungnam University*)

13F-6 Signal Modeling and Processing of IR-UWB Radar-based System for Vital Signal Monitoring
Eberechukwu N Paulson PEN, Sunwoo Kim*
(Hanyang University & Universiti Teknologi Malaysia, Hanyang University*)

13F-7 A Short Review On Swarm Of Unmanned Aerial Vehicles
Kelvin Dushime, Naqqash Dilshad, Lewis Nkenyereye, JaeSeung Song (Sejong University)

13F-8 The functionalities of cloud management system in support managing AI/ML-based solutions
Phuong Bac Ta, younghan Kim (Soongsil University)

Session Room Location

Convention Center, Alpensia Resort, Pyeongchang, Gangwon Province, Korea

Venue

1. Conference Venue : Alpensia Resort, Pyeongchang, Gangwon Province
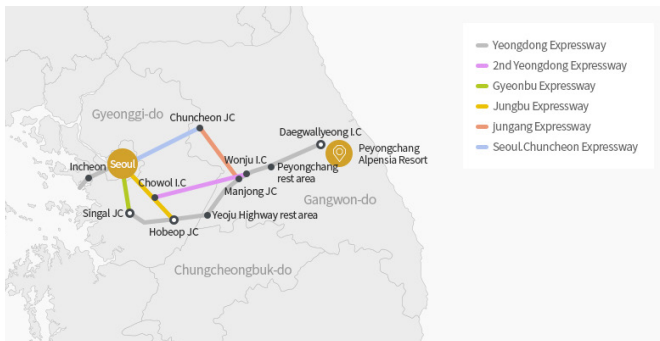**URL : www.alpensia.com/main.do**

Pyeongchang Alpensia Convention Center provides the magnificent atmosphere through its significant height and comfortable ambiance all in one place. It is the best conference facility in Korea that can accommodate more than 2,500 people and hold large-scale seminars, fashion shows, exhibitions, banquet dinner parties and other events. Connected with the 5-star hotel Holiday Inn Resort Pyeongchang, this superb business space also allows you to attend conferences with your families.

For successful international business, its features include high-quality lighting, acoustics, and stages. Also, the history of this global space where it successfully held large-scale events regarding the Winter Olympics 2018 will provide a great deal of satisfaction to all guests..
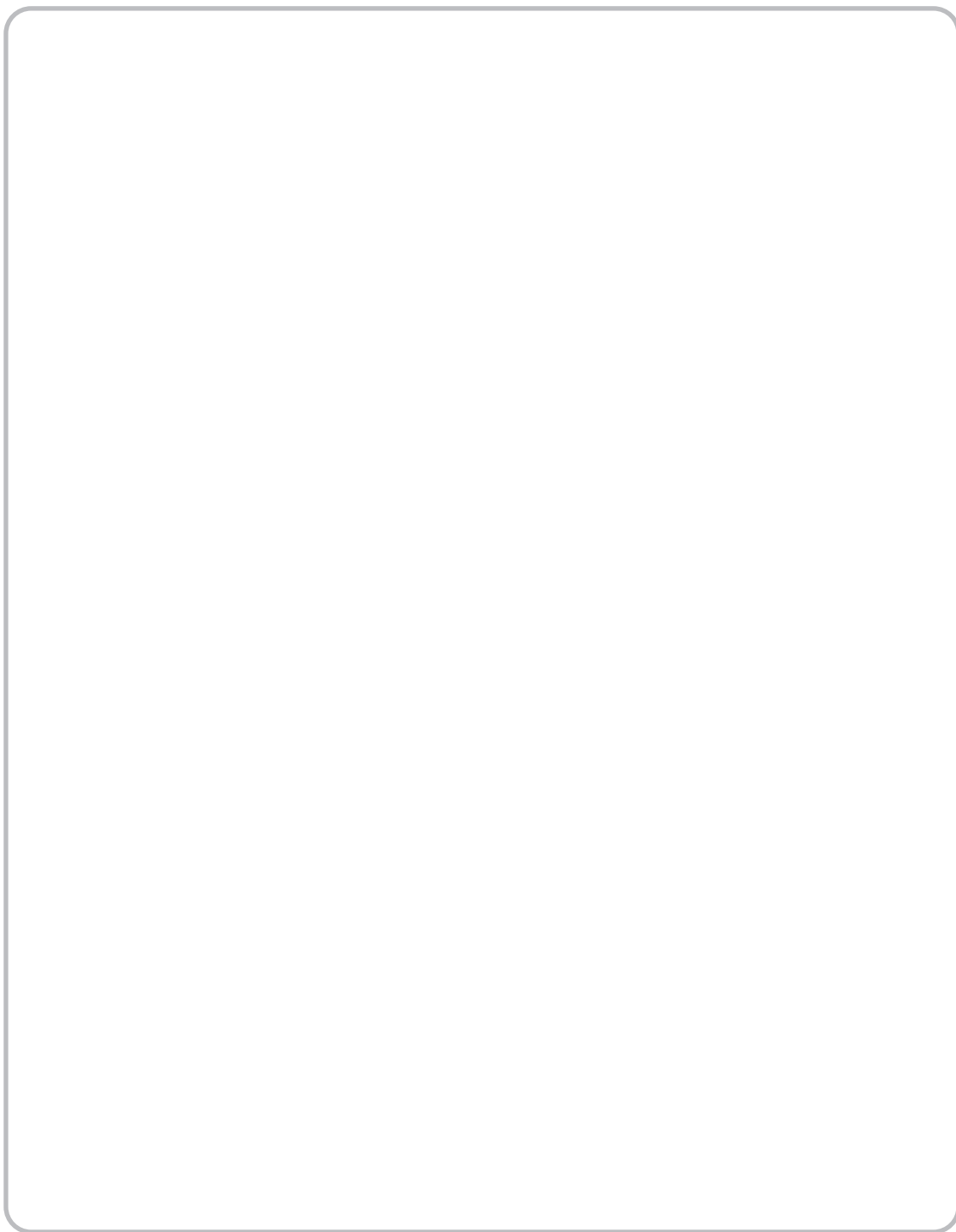
Venue

2. Location & Resort Map

DIRECTION

Follow hwy #1(Gyunbu Hwy) South till you come to junction for Hwy #4(Youngdong Hwy).
Then, take Hwy #4 East, toward Gangleung.
Once on Hwy #4 East, it is very much straight forward until you reach Daegwallyeong Interchange.
Along the way you will pass Ichon, Wonju, Seamal and Jinbu junctions.
Once you reach Hoenggye Interchange, take a right and follow the signs to Alpensia Resort.

NOTES

1. Private Van to / From Alpensia Resort
   - You can hire a private van transfer to/from Alpensia Resort.
   - Private van transfers are separate vehicles reserved exclusively for your group,
     so you have control over the pick-up and drop-off locations as well as times.
2. Private van to / from Alpensia Resort.
   - Tel : +82 70-5121-0820
   - E-mail : info@funtastickorea.com
   - website : http://funtastickorea.com/
   - Company : Funtastic Korea

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| 일시 | 2022년 2월 16일(수) ~ 18일(금)

| 주최 | 한국통신학회

KICS
한 국 통 신 학 회

ICT Convergence Korea 2022

2022년 3월 16일(수) ~ 17일(목)
The-K 호텔, 서울(서초구 양재동) (온/오프라인 병행)

"**회복, 포용, 도약** 그리고 **디지털 대전환: ICT 융합**"

K-Digital HOPE: ICT Convergence

Healing / Opportunity / Platform / Environment

문의처 : 한국통신학회 사무국 E-mail. conference@kics.or.kr / Tel. 02-3453-5555 (내선 8번)

공동주관

KICS 한국통신학회

TTA 한국정보통신기술협회 Telecommunications Technology Association

경제·인문사회연구회

NSR 국가보안기술연구소

농촌진흥청

SPRi 소프트웨어정책연구소 Software Policy & Research Institute

AIRI

ITP 인천테크노파크 INCHEON TECHNOPARK

IITP 정보통신기획평가원

KISDI 정보통신정책연구원

한국건강증진개발원 Korea Health Promotion Institute

KICT 한국건설기술연구원

KISTI 한국과학기술정보연구원 Korea Institute of Science and Technology Information

KOPTI 한국광기술원

KANC 한국나노기술원

KREI 한국농촌경제연구원 Korea Rural Economic Institute

KISA 한국인터넷진흥원

한국에너지기술연구원 KOREA INSTITUTE OF ENERGY RESEARCH

KERI 한국전기연구원

KETI 한국전자기술연구원 Korea Electronics Technology Institute

ETRI 한국전자통신연구원 Electronics and Telecommunications Research Institute

KILT Korea Institute of Lighting & ICT 한국조명ICT연구원

NIA 한국지능정보사회진흥원

한국지능형사물인터넷협회 Korea Intelligent IoT Association

KRRI 한국철도기술연구원 Korea Railroad Research Institute

KIOST 한국해양과학기술원

후   원 과학기술정보통신부 Ministry of Science and ICT

AI FRONTIERS SUMMIT

2022년 5월 26일(수) ~ 27일(목)
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