

■Field 이동통신 및 IoT

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## I Educational background

2005-2005 고려대학교 (공학박사 - 전자공학과) 1998-2000 고려대학교 (공학석사 - 전자공학과) 1992-1998 고려대학교 (공학사 - 전자공학과)

## Major careers

2019.03-현재 한림대학교 소프트웨어용합대학 부교수 2014.04-2019.02 경기과학기술대학교 전자통신공학과 조교수 2007.11-2014.03 삼성전자 종합기술원, DMC 연구소 수석연구원 2005.05-2007.10 Purdue Univ, UC-Irvine 박사후 연구원

## Studies & Books

[최근 주요 논문]

[교신겨자] Hyun-Ho Choi, <u>Wonjong Noh</u>, Outage Analysis of User Pairing Algorithm for Full-Duplex Cellular Networks, Wireless Communications and Mobile Computing, vol. 2019, Article ID 4909450, pp. 1-12 (2019)

[1계자] Wonjong Noh, Sung Hoon Lim, Tae-Suk Kim, Physical-Layer Network Coding Based Throughput-Optimal Transmission for Bidirectional Traffic, IEEE Trans. Vehicular Technology, vol. 67, no. 4, pp. 3130-3144 (2018)

[교신저자] Tae-Dong Lee, Byung Moo Lee, Wonjong Noh, Hierarchical Cloud Computing Architecture for Context-Aware IoT Services, IEEE Trans. Consumer Electronics, vol. 64, no. 2, pp. 222-230 (2018)

[교신저자] Byung Moo Lee, You Seung Rim, Wonjong Noh, A combination of selected mapping and clipping to increase energy efficiency of OFDM systems, PLOS ONE, vol. 12, no. 10, pp. 1-25 (2017)

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[1계자] Wonjong Noh, Chang-Yong Shin, Novel Control Framework for Multi-User Display and Data Transmission in Networked Virtual Reality Services, Journal of Nanoelectronics and Optoelectronics, vol. 11, no. 2, pp. 164-169 (2016)

[1계자] Wonjong Noh, Jong-Bu Lim, Wonjae Shin, Sung Hoon Lim, Taesuk Kim, Tae-Dong Lee, Kwanghun Han, Adaptive Transmission Control in Multiple Interference Neutralization Groups, IEEE Communications Letters, vol. 20, no. 3, pp. 526-529 (2016)

[교신저자] Taesuk Kim, Wonjong Noh, Identifying and coordinating joint impact of spatial reuse and multi-rate capability on wireless ad-hoc networks, Wireless Networks, vol. 21, no. 7, pp. 2181-2194 (2015)

[1계자] Wonjong Noh, Jihoon Lee, Sangkyung Kim, Game-theoretic resource allocation and decoding order control in OFDMA based multihop networks, IJAACS, vol. 8, no. 2/3, pp. 100-118 (2015)

[1계자] Wonjong Noh, Taesuk Kim, Flexible communication-bus architecture for distributed multimedia service in cloud computing platform, IEEE Trans. Consumer Electronics, vol. 59, no. 3, pp. 530-537 (2015)

[주요 등록 특허]

US9572048, Communication method and apparatus for device-to-device (D2D), Won Jong Noh, Won Jae Shin, Jong Bu Lim, Kyung Hun Jang,

US9532296, Method of multi-hop cooperative communication from terminal and base station and network for multi-hop cooperative communication, Won Jong Noh, Won Jae Shin, Kwang Hoon Han, Chang Yong Shin, Kyung Hun Jang

US9531449, Method of controlling interference in multi-hop network based on MIMO system and relay node and node pair using the method, Won-Jae Shin, Won Jong Noh, Jong Bu Lim, Kyung Hun Jang,

US9445423, Communication method of a base station and a terminal, Won Jong Noh, Joon, Tae Kim, Hyun Ho, Choi, Won Jae Shin, Dong Jo Park, Chang Yong Shin

US9408225, Method and apparatus for cooperative scheduling using interference between multiple points, Won Jong Noh, Kwang Hoon Han, Chang Yong Shin

US9338102, Scheduling method and apparatus based on physical layer network coding for bidirectional traffic, Won Jong Noh, Kwang Hoon Han, Chang Yong Shin

US9331764, Method and apparatus for aligning interference using a feed forward index in a hierarchical cell communication system, Won Jae Shin, Nam Yoon Lee. Won Jong Noh, Hyun Ho Choi

US9161251, Data transmission system for determining data transmission power using a virtual cell, Won Jong Noh, Yung Yi, Tae Soo Kwon, Soo Hwan Lee, Chang Yong Shin

US9072103, Cognitive inter-cell interference control method and apparatus, Hyun Ho Choi, Suwon-si (KR); Chang Yong Shin, Seoul (KR); Kyung Hun Jang, Suwon-si (KR); Won Jong Noh, Won Jae Shin,

US9020515, Communication system of performing uplink communication and downlink communication using overlapping radio resource, Hyun Ho Choi, Suwon-si (KR); Kyung Hun Jang, Suwon-si (KR); Chang Yong Shin, Seoul (KR); Won Jong Noh

US9014707, Apparatus and method for hierarchical rate splitting in hierarchical cell communication system, Won Jae Shin, Wan Choi, Hyun Ho Choi, Myung Gil Kang, Chang Yong Shin, Won Jong Noh

US9002279, System and method for aligning interference in uplink, Won Jae Shin, Nam Yoon Lee, ChangYong Shin, Kyung Hun Jang, Won Jong Noh, Hyun Ho Choi

US8976892, Beamforming method and apparatus using a rate splitting scheme in a multi-cell multi-antenna interference channel, Won Jae Shin, Hyun Ho Choi, Nam Yoon, Lee, Won Jong Noh, ChangYong Shin, Kyung Hun Jang

US8971945, System and method using a rate split scheme based on cooperation between receivers, Hyun Ho Choi, Pramod Viswanath, Chang Yong Shin, Won Jong Noh, Won-Jae Shin

US8917666, Wireless network using network coding, and method of adaptively adjusting buffering time in wireless network, Jae Hyun Kim, Suwon-si (KR); Sung

Hyun Cho, Jinju-si (KR); Kwang Taik, Kim, Yongin-si (KR); Won Jong Noh,

US8903405, Communication method of macro base station and micro base station for interference control, Won Jong Noh, Chang Yong Shin, Hyun Ho Choi. Won Jae Shin

US8892150, Communication method of neighboring terminal and target terminal, Won Jong Noh, Hyun Ho Choi, Won Jae Shin, Sang Uk Park, Dong Jo Park, Chang Yong Shin, Joon Tae Kim, Seung, Won Choi, Jung Min, Moon, Dong Ho Cho

US8855702, Communication system for inter-cell coordination, Tae Soo Kwon, Won Jong Noh, Chang Yong Shin
US8731553, 2014.05.20, Cooperative communication methods and a device for a target terminal and a cooperative terminal, Hyun Ho Choi, Dong Ho
Cho, Won Jong Noh, Won Jae Shin, Jung Min Moon, Chang Bae Yoon, Dong Jo Park, Sang Uk Park

US8717986, Apparatus and method for determining MIMO/DSM operating mode, Won Jong Noh, Yongin-si (KR); Yung Yi, Daejeon (KR); Tae Soo Kwon, Hwaseong-si (KR); Soo Hwan Lee, Gyeongsan-si (KR); Chang Yong Shin,

US8532647, Method and apparatus for determining downlink beamforming vectors in hierarchical cell communication system, Won Jae Shin, Nam Yoon Lee, Won Jong Noh, Young Jun Hong, Hyun Ho Choi, Chang Yong Shin, Kyung Hun Jang

US8437795, Communication system for inter-cell coordination, Tae Soo Kwon, Yongin-si (KR); Won Jong Noh, Yongin-si (KR); Chang Yong Shin, Yongin-si (KR)

US8412252, System and method using rate split scheme based on cooperation between receivers, Hyun Ho Choi, Pramod Viswanath, ChangYong Shin, Won Jong Noh, Won-Jae Shin

US8412104, Method and apparatus of controlling inter cell interference based on cooperation of intra cell terminals, Won Jae Shin, Cheul Soon Kim, Chang Yong Shin, Won Jong Noh, Hyun Ho Choi, Young Chul Sung, Yong Hoon Lee

 $US8406803, \\Multi-cell\ communication\ apparatus\ and\ method\ using\ rate-splitting\ scheme\ and\ transmission\ frame,\\Won\ Jong\ Noh,\ Hyun\ Ho\ Choi,\ Hyun\ Ho\ Ho\ Hyun\ Ho\ Ho\ Hyun\ Ho\ Hy$ Won Jae Shin, Chang Yong Shin

## Others

연구실 소개

연구실명 : 차세대 AI-통신 연구실 (Advanced AI-Communication Lab) 지도교수 : 노원종 위치 및 연락처 : 공학관 1346

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