Joongheon Kim

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Associate Professor, Korea University – School of Electrical Engineering, Seoul, Republic of Korea
– *Director*, Net-Zero CAFE (Connectivity and Autonomy for Future Ecosystem) Research Center (ITRC)
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Educational Backgrounds

- **University of Southern California (USC) – Viterbi School of Engineering**, Los Angeles, California, USA
  – Ph.D. (08/2009–08/2014) in **Computer Science**, Thomas Lord Department of Computer Science
  (Advisor: *Prof. Andreas F. Molisch (Fellow of the IEEE)*, Ming Hsieh Department of Electrical and Computer Engineering)
  – M.S. (05/2014) in **Computer Science** with specialization in **High Performance Computing and Simulations**
  – M.S. (05/2012) in **Electrical Engineering**
- **Korea University – College of Informatics**, Seoul, Republic of Korea
  – M.S. (03/2004–02/2006) in **Computer Science and Engineering**
  (Advisor: *Prof. Wonjun Lee (Fellow of the IEEE)*, Department of Cyber Defense and Future Network Center)
  – B.S. (03/1999–02/2004) in **Computer Science and Engineering**

Professional Affiliations

R&D Positions

- **Korea University**, Seoul, Republic of Korea
  – *Associate Professor (03/2021–Present)*, *Assistant Professor (09/2019–02/2021)*, School of Electrical Engineering
  – *Adjunct Professor (03/2023–02/2028 (Expected))*, Department of Communications Engineering (with **Samsung Electronics**)
  – *Adjunct Professor (11/2022–02/2028 (Expected))*, Department of Future Science and Technology Business (Graduate School)
  – *Adjunct Professor (03/2021–02/2026 (Expected))*, Department of Semiconductor Engineering (with **SK Hynix**)
- **Chung-Ang University – College of Computer Science and Software**, Seoul, Republic of Korea
  – *Assistant Professor (03/2016–08/2019)*, School of Computer Science and Engineering
- **Intel Corporation – Platform Engineering Group**, Silicon Valley (Santa Clara), California, USA
  – *Systems Engineer (09/2013–02/2016)*, WiGig & mmWave Standards and Advanced Technology (SAT) Team
- **University of Southern California (USC) – Viterbi School of Engineering**, Los Angeles, California, USA
  – *Annenberg Graduate Fellow (08/2009)*, Awarded with Ph.D. admission in Computer Science from USC (2009)
  – *Ph.D. Research Assistant (01/2011–08/2014)*, Communication Sciences Institute (CSI) (Advised by Prof. Andreas F. Molisch)
  – *Teaching Assistant (01/2012–05/2013)*, Computer Science and Electrical Engineering Departments (CSCI455x and EE579)
- **InterDigital**, San Diego, California, USA
  – *Intern (05/2012–08/2012)*, Wireless Systems Evolution Department
- **LG Electronics CTO Office**, Seoul, Republic of Korea
  – *Research Engineer (01/2006–08/2009)*, Multimedia Research Laboratory, Seocho R&D Campus

Academia (Membership, Editorial Boards, and Services)

- **IEEE**
  – *Senior Member (2018–)*, *Member (2006–2017)*
  – *Distinguished Lecturer (2022–2023)*, **IEEE Communications Society**
  – *Associate Editor (2025–)*, **IEEE Communications Surveys and Tutorials**
  – *Editor (2023–)*, **IEEE Internet of Things Journal**
  – *Associate Editor (2020–)*, **IEEE Transactions on Vehicular Technology**
  – *Guest Editor*, **Journal of Communications and Networks** (S.I. on Quantum Technologies for Communication Systems)
  – *Guest Editor*, **IEEE Communications Standards Magazine** (S.I. on Recent and Future Evolution of Wi-Fi)

Awards and Honors

Research and Academic Excellence (International)

- **Certificate of Appreciation** – *IEEE/IFIP WiOpt (2024)* 10/2024
- **Best Editor Award** – *ICT Express (Elsevier)* 07/2023
- **Finalist (Top 25), AAAI Student Abstract and Poster Session – Oral Presentation Contest** 02/2023
- **IEEE ICTC Best Paper Award** – *IEEE Communications Society* 10/2022
- **Spotlight, Oral Presentation** – *ICML Workshop on Dynamic Neural Networks (2022)* 07/2022
- **IEEE MMTC Best Journal Paper Award** – *IEEE Communications Society* 2021
- **IEEE ICOIN Best Paper Award** – *IEEE Computer Society* 01/2021
- **IEEE MMTC Outstanding Young Researcher Award** – *IEEE Communications Society* 2020
- **IEEE Systems Journal Best Paper Award** – *IEEE Systems Council* 2020
- **Next Generation and Standards (NGS) Division Recognition Award** – *Intel Corporation* Q1/2015
- **Annenberg Graduate Fellowship Award** – *University of Southern California* 2009–2013
- **IEEE Seoul Section Student Paper Contest** 2024 (Bronze), 2024 (Bronze), 2023 (Bronze), 2020 (Bronze), 2019 (Gold)

- **IEEE VTS Seoul Chapter Award** – *IEEE Vehicular Technology Society* 2022, 2023, 2022, 2021, 2021, 2019

Research and Academic Excellence (Korea Regional)

- **Best Paper Award, The Journal of KICS** – *KICS* 11/2024
- **HFR Paper Award (Area: Quantum Technologies and Quantum Communications)** – *KICS* 11/2023
- **Korea Electronics Technology Institute (KETI) President Award** – *KICS* 06/2023
- **Haedong Paper Award** – *KICS* 02/2023, 06/2021
- **Insung Research Grant Award** – *Korea University* 01/2023
- **Haedong Young Scholar Award** – *KICS* and *Haedong Foundation* 12/2018
- **Outstanding Paper Award** – *LG Electronics CTO Office, Multimedia Research Laboratory* 01/2008
- **RFID Expert Group President Award** – *The 3rd RFID/USN Research Paper Contest* 10/2007
- **ETRI President Award** – *The 2nd RFID/USN Research Paper Contest* 11/2006
- **Korea Association of RFID/USN (KARUS) President Award** – *The 1st RFID/USN Research Paper Contest* 10/2005
- **Scholarships for Academic Excellence** – *Korea University (Computer Science and Engineering)* Fall 2000, Fall 1999

Teaching Excellence at Korea University (11 Times)

- **Granite Tower Best Teaching Award (Top 5%)** Spring 2024, Spring 2022, Fall 2021, Spring 2021, Fall 2019
- **Best Teaching Award (Top 20%)** Spring 2024, Spring 2024, Spring 2022, Fall 2021, Spring 2021, Fall 2020

Academic and University Services

- **Outstanding Contribution Award** – *KICS* 2024, 2021, 2019
- **Outstanding Contribution Award** – *KIISE Information Network Society* 2023, 2022
- **2022 Best Chapter Award, IEEE Vehicular Technology Society Chapter**, Awarded as a Treasure 2022
- **Outstanding Contribution Award** – *Open Standards and ICT Association (OSIA)* 2021
- **Appreciation Recognition** – *Daegu Gyeongbuk Institute of Science and Technology (DGIST)* 2021
- **Fellow Employee Recognition [#3081146]** – *Intel Corporation* 2014
- **Certificate of Appreciation** – *Department of Computer Science, University of Southern California* 2010

R&D Projects (Totally, 15,795,033 USD ≈ 15,795,033,875 KRW)

University-Wide/Center Projects

- *Net-Zero CAFE Research Center* (07/2024–12/2031), **ITRC (Korea Univ)**, *Center Director*
- *Intelligent 6G Wireless Access System Research Center* (04/2021–12/2025), **6G AI Research Center (Korea Univ)**
- *K-Starlink: Dynamic Reconfigurable and Intelligent Space-Terrestrial Networks* (06/2021–05/2024), **Basic Research Lab (Ajou)**
- *Nano UAV Intelligence Systems Research Lab* (10/2020–08/2023), **ADD Military Special Research Center (Kwangwoon)**
- *5G/Unmanned Vehicle Research Center (5G/UV-RC)* (06/2020–12/2022), **ITRC (Hanyang)**
- *Human Resource Development for the Biomedical Unstructured Big Data Analysis* (08/2018–12/2021), **ITRC (SNU-Hospital)**
- *Network Engineering: Development and Application of Novel Data Science Driven Framework for Efficient Network Design* (06/2017–05/2020), **Basic Research Lab (Chung-Ang)**
- *Intelligent Internet of Energy (IoE) Data Research Center* (02/2020–05/2020), **ITRC (Kookmin)**

Industry-Funded Projects

- *Advancement Technology Development for Torpedo Deception Strategies in Submarines* (11/2022–11/2026), **LIG Nex1**
- *Advancement Tech Dev for Submarine Target Identification and Engagement Support Intelligence* (11/2022–11/2026), **LIG Nex1**
- *Mapping between Real World and VR for End-Edged Cloud Real-Time VR Servers* (09/2020–09/2025), **Samsung Electronics**
- *Research on Learning-based Swarm Mission Planning Algorithms* (03/2024–02/2025), **LIG Nex1**
- *Quantum Machine Learning-based Objection Detection for Point Cloud and its Acceleration* (12/2022–04/2024), **Hyundai Motors**
- *Routing Algorithms for LEO Satellite Networks* (12/2022–08/2023), **Solvit System**
- *Optimal Positioning Algorithms for Wide-Area Relaying Networks* (12/2022–08/2023), **Solvit System**
- *Distributed Learning Algorithms to Build AI Models with Multi-Center Clinical Data* (11/2022–02/2023), **Cipherome**
- *Cellular/Wi-Fi Handover Technology Development* (02/2022–12/2022), **LG Electronics CTO Division – Smart Mobility Lab.**
- *Research Trends in Digital Twin Applications to Autonomous Driving* (03/2022–04/2022), **Hyundai NGV**
- *Distributed Learning System Design and Implementation for Clinical Applications* (02/2022–03/2022), **Cipherome**
- *Super-Resolution Performance Optimization in Mobile Platforms* (05/2020–08/2020), **Samsung SDS**
- *Deep Learning Algorithms for mVOC Concentration Analysis* (03/2020–06/2020), **Samsung Electronics (C-Lab)**
- *Visual Recognition Software Implementation using Deep Learning Tools* (05/2019–11/2019), **Hyundai Motors**
- *A Priori Techniques Research for Efficient Multi-Edge Computing* (06/2017–12/2017), **Samsung Electronics (Software Center)**

Government-Funded Projects

- *Quantum AI Empowered Second-Life Platform Technology* (07/2024–12/2031), IITP **(Software Star-Lab)**
- *6GARROW: 6G AI-Native Integrated RAN-Core Networks* (09/2024–08/2027), IITP
- *AI Bots Collaborative Platform and Self-Organizing Artificial Intelligence Technology Development* (04/2022–12/2026), IITP
- *Development of Integrated Development Framework that supports Automatic Neural Network Generation and Deployment optimized for Runtime Environment* (04/2021–12/2025), IITP
- *Quantum Hyper-Driving: Quantum-Inspired Hyper-Connected and Hyper-Sensing Autonomous Mobility* (03/2022–02/2025), NRF

- *Korea-Japan Joint Seminar Project for Generative and Multi-Modal AI Technologies* (10/2023–09/2024), NRF
- *Integrated Perception Technology Developments for Public Safety Platforms* (06/2019–05/2023), NRF
- *Development of Quantum Deep Reinforcement Learning Algorithm using QAOA* (10/2019–04/2022), NRF
- *mmWave Radar and Deep Reinforcement Learning based Optimal Policy Autonomous Driving* (06/2019–02/2022), NRF
- *Development of Privacy-Reinforcing Distributed Transfer-Iterative Learning Algorithm* (07/2019–12/2021), MHW
- *Virtual Presence in Moving Objects through 5G (PriMO-5G)* (06/2018–06/2021), IITP
- *Distributed Secure Platform for Scalable Clinical OMOP CDM Models* (04/2019–12/2020), MHW
- *mmWave High-Speed Networking Platform Design for Next-Generation Convergence Services* (06/2016–05/2019), NRF
- *Feasibility Study of 60 GHz IEEE 802.11ad for Virtual Reality (VR) Platforms* (04/2017–12/2017), *IITP*

Government-Funded Research Institute Projects

- *Quantum Reinforcement Learning for Satellite Backhaul Routing in Disaster Networks* (05/2024–11/2024), ETRI
- *NOMA-based Resource Allocation Research in Space-Air-Ground Integrated Networks* (09/2023–11/2023), ETRI
- *Autonomous Intelligent COA Search Methods for Cyber-Attacks* (12/2021–11/2022), ADD
- *Research on Intelligent Agent-based CPS Security and Reliability* (04/2021–11/2021), TTA
- *Multi-GPU based Automotive HPC Platform Development* (04/2020–10/2020), ETRI
- *Cooperative Deep Reinforcement Learning for Online Game Multi-Agents* (04/2020–08/2020), ETRI
- *Verification Testbed Implementation for Privacy-Preserving Trust Data Generation* (10/2019–11/2019), ETRI
- *Measurement and Analysis of Multi-Task GPU Scheduling Delays* (05/2019–10/2019), ETRI
- *Probabilistic Decision Making and Econometric Methods for Micro-Grid* (05/2017–04/2019), KEPCO Research Institute
- *GPU Scheduling Performance Analysis under Queueing Delay Considerations* (05/2018–10/2018), ETRI
- *Improving Massive Deep Learning Training via Computation and Communication Acceleration* (04/2018–10/2018), ETRI
- *Parsing Techniques for Artificial Neural Network (ANN) Data Processing* (09/2017–11/2017), ETRI

University of Southern California (USC) – Viterbi School of Engineering (Ph.D. Research Projects)

- *Video Aware Wireless Networks (VAWN) Research Program*, **Intel Labs**, **Verizon Wireless**, and **Cisco Systems**
- *60 GHz Real-Time Wireless Video Broadcasting*, Supported by a Gift from **Disney Research Zürich**

Awards and Fellowship Funds

- *Insung Research Grant Award* (03/2023–02/2024), Korea University
  For recognizing Korea University professors in research excellence during the first 3 years at Korea University (Top 5%)
- *Annenberg Graduate Fellowship Award* (08/2009–06/2013), University of Southern California
  Awarded Fund: 4 Year Full Scholarship (Tuition Waiver and $120,000 Stipend ($30,000/year for 4 years))

Selected Publications

- **9103+ Citations** (H-index: 45+, i10-index 197+), obtained from Google Scholar Profile (as of February 2, 2025)

Dissertation, Books, and Book Chapters

- *Fundamentals of 6G Communications and Networking*, Springer (2023). (Editors: X. Lin, J. Zhang, Y. Liu, J. Kim)
- *Elements of Next-Generation Wireless Video Systems: Millimeter-Wave and Device-to-Device Algorithms*
  Ph.D. Dissertation (Computer Science), University of Southern California (Los Angeles, California, USA, August 2014)

Selected Papers

■ ***Top-Tier Conferences***

[IPDPS'25] AQUA: Hardware-Agnostic Qubit Allocation for Quantum Multi-Programming, **IEEE IPDPS (2025)** *(X. Piao, J.Y. Shim, J. Kim, J.-K. Kim)*

[NOMS'25] Joint Multi-Agent Reinforcement Learning and Message-Passing for Distributed Multi-UAV Network Management using Conflict Graphs, **IEEE/IFIP NOMS (2025)** *(Y. Cho, H. Lee, S. Park, J. Kim)*

[CIKM'24] Hands-On Introduction to Quantum Machine Learning, **ACM CIKM (2024)** *(S.Y.-C. Chen, J. Kim)*

[WiOpt'24] Advanced Taxiing Path Guidance using Multi-Agent Reinforcement Learning for Air Traffic Management, **IEEE/IFIP WiOpt (2024)** *(S. Lee, G.S. Kim, S. Park, J. Kim)*

[CIKM'23] Quantum Split Learning for Privacy-Preserving Information Management, **ACM CIKM (2023)** *(S. Park, H. Baek, J. Kim)*

[CIKM'23] Logarithmic Dimension Reduction for Quantum Neural Networks, **ACM CIKM (2023)** *(H. Baek, S. Park, J. Kim)*

[AAAI'23] Quantum Multi-Agent Meta Reinforcement Learning, **AAAI (2023)** *(W.J. Yun, J. Park, J. Kim)*

[CIKM'22] Hierarchical Reinforcement Learning using Gaussian Random Trajectory Generation in Autonomous Furniture Assembly, **ACM CIKM (2022)** *(W.J. Yun, D. Mohaisen, S. Jung, J.-K. Kim, J. Kim)*

[WiOpt'22] Cooperative Video Quality Adaptation for Delay-Sensitive Dynamic Streaming using Adaptive Super-Resolution, **IEEE/IFIP WiOpt (2022)** *(M. Choi, W.J. Yun, J. Kim)*

[INFOCOM'22] Joint Superposition Coding and Training for Federated Learning over Multi-Width Neural Networks, **IEEE INFOCOM (2022)** *(H. Baek, W.J. Yun, Y. Kwak, S. Jung, M. Ji, M. Bennis, J. Park, J. Kim)*

[ICDCS'20] Understanding the Potential Risks of Sharing Elevation Information on Fitness Applications, **IEEE ICDCS (2020)** *(Ü. Meteriz, N.F. Yildiran, J. Kim, D. Mohaisen)*

[IJCAI'19] Randomized Adversarial Imitation Learning for Autonomous Driving, **IJCAI (2019)** *(M. Shin, J. Kim)*

[ICBC'19] Mempool Optimization for Defending Against DDoS Attacks in PoW-based Blockchain Systems, **IEEE ICBC (2019)** *(M. Saad, L. Njilla, C. Kamhoua, J. Kim, D. Nyang, A. Mohaisen)*

[ICDCS'18] ShmCaffe: A Distributed Deep Learning Platform with Shared Memory Buffer for HPC Architecture, **IEEE ICDCS (2018)** *(S. Ahn, J. Kim, E. Lim, W. Choi, A. Mohaisen, S. Kang)*

[MM'17] REQUEST: Seamless Dynamic Adaptive Streaming over HTTP for Multi-Homed Smartphone under Resource Constraints, **ACM Multimedia (2017)** *(J. Koo, J. Yi, J. Kim, M.A. Hoque, S. Choi)*

[MobiSys'10] Energy-Efficient Rate-Adaptive GPS-based Positioning for Smartphones, **ACM MobiSys (2010)** *(J. Paek, J. Kim, R. Govindan)*

[ICCCN'05] Effect of Localized Optimal Clustering for Reader Anti-Collision in RFID Networks: Fairness Aspect to the Readers, **IEEE ICCCN (2005)** *(J. Kim, W. Lee, J. Yu, J. Myung, E. Kim, C. Lee)*

■ *IEEE Journals and Magazines*

[TVT.*accepted*] Dynamic Quantum Federated Learning for UAV-based Autonomous Surveillance, **IEEE Transactions on Vehicular Technology**. *(S. Park, S.B. Son, S. Jung, J. Kim)*

[TIV.*accepted*] Adaptive Quantum Federated Learning for Autonomous Surveillance Multi-Drone Networks, **IEEE Transactions on Intelligent Vehicles**. *(S. Park, C. Park, S. Jung, J. Kim)*

[TIV.*accepted*] Neural Myerson Auction for Truthful and Distributed Mobile Charging in UAV-Assisted Digital-Twin Networks, **IEEE Transactions on Intelligent Vehicles**. *(S. Jung, H. Baek, J. Kim)*

[TNSM'25.04] Intelligent Extra Resource Allocation for Cooperative Awareness Message Broadcasting in Cellular-V2X Networks, **IEEE Transactions on Network and Service Management**, 22(2):ppp–ppp (2025). *(S. Jung, J.-H. Kim, J. Kim)*

[TMC'25.02] Fast Quantum Convolutional Neural Networks for Low-Complexity Object Detection in Autonomous Driving Applications, **IEEE Transactions on Mobile Computing**, 24(2):1031–1042 (2025). *(E.J. Roh, H. Baek, D. Kim, J. Kim)*

[CM'24.12] The Matrix: Quantum AI for Interacting Two Worlds in Prioritized Metaverse Spaces, **IEEE Communications Magazine**, 62(12):97–103 (2024). *(S. Park, H. Baek, J. Kim)*

[TON'24.12] Spatio-Temporal Multi-Metaverse Dynamic Streaming for Hybrid Quantum-Classical Systems, **IEEE/ACM Transactions on Networking**, 32(6):5279–5294 (2024). *(S. Park, H. Baek, J. Kim)*

[TMC'24.12] Joint Quantum Reinforcement Learning and Stabilized Control for Spatio-Temporal Coordination in Metaverse, **IEEE Transactions on Mobile Computing**, 23(12):12410–12427 (2024). *(S. Park, J. Chung, C. Park, S. Jung, M. Choi, S. Cho, J. Kim)*

[IOTJ'24.12] Markov Decision Policies for Distributed Angular Routing in LEO Mobile Satellite Constellation Networks, **IEEE Internet of Things Journal**, 11(23):38744–38754 (2024). *(S. Park, G.S. Kim, S. Jung, J. Kim)*

[CM'24.10] Quantum Multi-Agent Reinforcement Learning is All You Need: Coordinated Global Access in Integrated TN/NTN Cube-Satellite Networks, **IEEE Communications Magazine**, 62(10):86–92 (2024). *(S. Park, G.S. Kim, Z. Han, J. Kim)*

[Access'24.10] Sensing-to-Sky Intermittent Connectivity Realization for LTE-Enabled Drone Platforms: Embedded Design, Measurement Study, and Positioning Applications, **IEEE Access (IEEE Vehicular Technology Society Section)**, 12:137360–137372 (2024). *(J. Kim, S. Park, U. Jo, T. Kim, S. Jung, J. Kim)*

[TNSM'24.08] Cooperative Multi-UAV Positioning for Aerial Internet Service Management: A Multi-Agent Deep Reinforcement Learning Approach, **IEEE Transactions on Network and Service Management**, 21(4):3797–3812 (2024). *(J. Kim, S. Park, S. Jung, C. Cordeiro)*

[Access'24.08] Enhancing Cost-Effective 5G Virtualized RAN Pooling Gain on Clouds: An Intelligent Auto-Scaling Approach, **IEEE Access**, 12:111322–111333 (2024). *(K. Cho, J. Kim, S. Jung)*

[TVT'24.07] Age-of-Information Aware Caching and Delivery for Infrastructure-Assisted Connected Vehicles, **IEEE Transactions on Vehicular Technology**, 73(7):10681–10696 (2024). *(S. Park, C. Park, S. Jung, M. Choi, J. Kim)*

[CM'24.06] Quantum Multi-Agent Reinforcement Learning for Autonomous Mobility Cooperation, **IEEE Communications Magazine**, 62(6):106–112 (2024). *(S. Park, J.P. Kim, C. Park, S. Jung, J. Kim)*

[TVT'24.04] Learning-Based Cooperative Mobility Control for Autonomous Drone-Delivery, **IEEE Transactions on Vehicular Technology**, 73(4):4870–4885 (2024). *(S. Park, C. Park, J. Kim)*

[Access'24.04] Dynamic Quantum Federated Learning for Satellite-Ground Integrated Systems using Slimmable Quantum Neural Networks, **IEEE Access (IEEE Vehicular Technology Society Section)**, 12:58239–58247 (2024). *(S. Park, S. Jung, J. Kim)*

[Access'24.04] Quantum Reinforcement Learning for Spatio-Temporal Prioritization in Metaverse, **IEEE Access**, 12:54732–54744 (2024). *(S. Park, H. Baek, J. Kim)*

[TWC'24.03] Joint User Clustering, Beamforming, and Power Allocation for mmWave-NOMA with Imperfect SIC, **IEEE Transactions on Wireless Communications**, 23(3):2025–2038 (2024). *(B. Lim, W.J. Yun, J. Kim, Y.-C. Ko)*

[TGCN'24.03] Joint Delay-Sensitive and Power-Efficient Quality Control of Dynamic Video Streaming using Adaptive Super-Resolution, **IEEE Transactions on Green Communications and Networking**, 8(1):103–117 (2024). *(M. Choi, W.J. Yun, S.B. Son, S. Park, J. Kim)*

[TIV'24.02] Intelligent Caching for Seamless High-Quality Streaming in Vehicular Networks: A Multi-Agent Reinforcement Learning Approach, **IEEE Transactions on Intelligent Vehicles**, 9(2):3672–3686 (2024). *(M. Choi, T. Xiang, J. Kim)*

[TNNLS'24.02] Hierarchical Deep Reinforcement Learning-based Propofol Infusion Assistant Framework in Anesthesia, **IEEE Transactions on Neural Networks and Learning Systems**, 35(2):2510–2521 (2024). *(W.J. Yun, M. Shin, D. Mohaisen, K. Lee, J. Kim)*

[TMC'24.01] Learning Location from Shared Elevation Profiles in Fitness Apps: A Privacy Perspective, **IEEE Transactions on Mobile Computing**, 23(1):581–596 (2024). *(U. Meteriz, N.F. Yildiran, J. Kim, D. Mohaisen)*

[TON'23.12] SlimFL: Federated Learning with Superposition Coding over Slimmable Neural Networks, **IEEE/ACM Transactions on Networking**, 31(6):2499–2514 (2023). *(W.J. Yun, Y. Kwak, H. Baek, S. Jung, M. Ji, M. Bennis, J. Park, J. Kim)*

[IOTJ'23.11] Quantum Multiagent Actor–Critic Networks for Cooperative Mobile Access in Multi-UAV Systems, **IEEE Internet of Things Journal**, 10(22):20033–20048 (2023). *(C. Park, W.J. Yun, J.P. Kim, S. Park, T.K. Rodrigues, S. Jung, J. Kim)*

[TVT'23.11] Two-Stage Self-Adaptive Task Outsourcing Decision Making for Edge-Assisted Multi-UAV Networks, **IEEE Transactions on Vehicular Technology**, 72(11):14889–14905 (2023). *(S. Jung, C. Park, M. Levorato, J.-H. Kim, J. Kim)*

[IC'23.09-10] EQuaTE: Efficient Quantum Train Engine for Run-Time Dynamic Analysis and Visual Feedback in Autonomous Driving, **IEEE Internet Computing**, 27(5):24–31 (2023). *(S. Park, H. Feng, C. Park, Y.K. Lee, S. Jung, J. Kim)*

[OJCS'23.09] Real-Time High-Quality Visualization for Volumetric Contents Rendering: A Lyapunov Optimization Framework, **IEEE Open Journal of the Computer Society**, 4:243–252 (2023). *(H. Baek, R. Lee, S. Jung, J. Kim, S. Park)*

[TIV'23.08] Multi-Agent Reinforcement Learning for Cooperative Air Transportation Services in City-Wide Autonomous Urban Air Mobility, **IEEE Transactions on Intelligent Vehicles**, 8(8):4016–4030 (2023). *(C. Park, G.S. Kim, S. Park, S. Jung, J. Kim)*

[IOTJ'23.06] Quantum Multiagent Actor-Critic Neural Networks for Internet-Connected Multirobot Coordination in Smart Factory Management, **IEEE Internet of Things Journal**, 10(11):9942–9952 (2023). *(W.J. Yun, J.P. Kim, S. Jung, J.-H. Kim, J. Kim)*

[Access'23.05] Entropy-Aware Similarity for Balanced Clustering: A Case Study with Melanoma Detection, **IEEE Access**, 11:46892–46902 (2023). *(S.B. Son, S. Park, J. Kim)*

[Access'23.03] Audio-to-Visual Cross-Modal Generation of Birds, **IEEE Access**, 11:27719–27729 (2023). *(J.Y. Shim, J. Kim, J.-K. Kim)*

[Access'23.02] Workload-Aware Scheduling using Markov Decision Process for Infrastructure-Assisted Learning-Based Multi-UAV Surveillance Networks, **IEEE Access (IEEE Vehicular Technology Society Section)**, 11:16533–16548 (2023). *(S. Park, C. Park, S. Jung, J.-H. Kim, J. Kim)*

[TITS'23.01] Self-Configurable Stabilized Real-Time Detection Learning for Autonomous Driving Applications, **IEEE Transactions on Intelligent Transportation Systems**, 24(1):885–890 (2023). *(W.J. Yun, S. Park, J. Kim, D. Mohaisen)*

[JCN'22.12] Neural Myerson Auction for Truthful and Energy-Efficient Autonomous Aerial Data Delivery, **Journal of Communications and Networks**, 24(6):730–741 (2022). *(H. Lee, S. Kwon, S. Jung, J. Kim)*

[JCN'22.12] Parallelized and Randomized Adversarial Imitation Learning for Safety-Critical Self-Driving Vehicles, **Journal of Communications and Networks**, 24(6):710-721 (2022). *(W.J. Yun, M. Shin, S. Jung, S. Kwon, J. Kim)*

[TII'22.10] Cooperative Multi-Agent Deep Reinforcement Learning for Reliable Surveillance via Autonomous Multi-UAV Control, **IEEE Transactions on Industrial Informatics**, 18(10):7086–7096 (2022). *(W.J. Yun, S. Park, J. Kim, M. Shin, S. Jung, D. Mohaisen, J.-H. Kim)*

[TVT'22.07] Joint Pilot Design and Channel Estimation using Deep Residual Learning for Multi-Cell Massive MIMO under Hardware Impairments, **IEEE Transactions on Vehicular Technology**, 71(7):7599–7612 (2022). *(B. Lim, W.J. Yun, J. Kim, Y.-C. Ko)*

[ISJ'22.06] Securing Heterogeneous IoT with Intelligent DDoS Attack Behavior Learning, **IEEE Systems Journal**, 16(2):1974–1983 (2022). *(N.-N. Dao, T. Phan, U. Sa'ad, J. Kim, T. Bauschert, D.-T. Do, S. Cho)*

[CSM'22.06] Recent and Future Evolution of Wi-Fi, **IEEE Communications Standards Magazine**, 6(2):8–11 (2022). *(E. Au, L. Wilhelmsson, T. Baykas, J. Kim)*

[TMC'22.05] Supremo: Cloud-Assisted Low-Latency Super-Resolution in Mobile Devices, **IEEE Transactions on Mobile Computing**, 21(5):1847–1860 (2022). *(J. Yi, S. Kim, J. Kim, S. Choi)*

[TVT'22.05] Stabilized Detection Accuracy Maximization using Adaptive SAR Image Processing in LEO Networks, **IEEE Transactions on Vehicular Technology**, 71(5):5661–5665 (2022). *(K. Kim, J.-H. Lee, S. Jung, J. Kim, J.-H. Kim)*

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