Oral Session

Dec. 1 (Wed) 15:00-16:30

Session A1: Physical & Fundamental		Chair: Kazuki Maruta (Tokyo Institute of Technology)
A1-1	Machine-Learning Approach to Binary Classification of Uplink-Channel States for Secure Body-Coupled Communication	Ai-ichiro Sasaki (Kindai University), Akinori Ban (Kindai University)
A1-2	A study on 920 MHz propagation characteristics close to ceiling with metal beam by using FDTD method for secure IoT communication	Naotake Yamamoto (Panasonic corporation), Taichi Sasaki (Panasonic corporation), Atsushi Yamamoto (Panasonic corporation), Tetsuya Hishikawa (Panasonic corporation), Kentaro Saito (Tokyo Denki University), Jun-ichi Takada (Tokyo Institute of Technology), Toshiyuki Maeyama (Takushoku University)
A1-3	Generation of one-dimensional random walks driven by quantum walks	Tomoki Yamagami (The University of Tokyo), Etsuo Segawa (Yokohama National University), Nicolas Chauvet (The University of Tokyo), André Röhm (The University of Tokyo), Ryoichi Horisaki (The University of Tokyo), Makoto Naruse (The University of Tokyo)
A1-4	Proposal of efficient algorithms for large scale pairing	Naoki Fujita (The University of Tokyo), Nicolas Chauvet (The University of Tokyo), André Röhm (The University of Tokyo), Ryoichi Horisaki (The University of Tokyo), Aohan Li (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science), Makoto Naruse (The University of Tokyo)
A1-5	A Wideband Double-Balanced Multiplier Integrated Circular-Polarization Switchable Microstrip Antenna with Parasitic Elements	Tatsuki Kayashima (Saga University), Eisuke Nishiyama (Saga University), Ichihiko Toyoda (Saga University)

Session B1: Optical Transmission		Chair: Kazuhiko Aikawa (Fujikura Ltd.)
B1-1	The Suppressing Transient Response with Shorter Burst Periods Using Standard EDFAs in Optical Burst Transmission System	Kana Masumoto (NTT), Toshiya Matsuda (NTT), Takeshi Seki (NTT), Masahiro Nakagawa (NTT), Kota Nishiyama (NTT), Takeshi Miyamura (NTT)
B1-2	Optimization of roll-off factor in ultrahigh-speed WDM Nyquist pulse transmission	Aoi Watanabe (Tohoku University), Masato Yoshida (Tohoku University), Toshihiko Hirooka (Tohoku University), Masataka Nakazawa (Tohoku University)
B1-3	Performance comparison between injection-locked carrier frequency conversion and self-heterodyne detection methods in coherently-linked optical and wireless transmission for 6G	Keisuke Kasai (Tohoku University), Taisei Sato (Tohoku University), Koichi Shirahata (Tohoku University), Toshihiko Hirooka (Tohoku University), Masato Yoshida (Tohoku University), Masataka Nakazawa (Tohoku University)

Session D1: AI		Chair: Kiyohito Yoshihara (KDDI Research)
D1-1	User Data Selection using CNN Feature Extractor for Fingerprint Localization	Yohei Konishi (University of Hyogo), Satoru Aikawa (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Yuta Sakai (University of Hyogo)
D1-2	An Experimental Study on Improving Accuracy of Location Estimation in Finger Print Using CNN and ResNet	Yu Sakanishi (University of Hyogo), Satoru Aikawa (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Yuta Sakai (University of Hyogo)
D1-3	Coordinate interpolation of Indoor Neural Network Localization by Particle Filter	Kaishin Hori (University of Hyogo), Satoru Aikawa (University of Hyogo), Shinichiro Yamamoto (University of Hyogo), Yuta Sakai (University of Hyogo)
D1-4	Handwritten Numerical Character Recognition using LSTM based on Dual Leap Motion Controllers	Noriaki Kaneko (Sophia University), Masakatsu Ogawa (Sophia University)

Dec. 2 (Thu) 13:00-14:30

Session B2: Sensing and Position Estimation		Chair: Masayoshi Ohashi (Fukuoka University)
B2-1	Experiments for performance evaluation of position estimation algorithm for capsule endoscope using human abdominal phantom containing multiple organs	Akihiro Yoshitake (Chiba university), Masaharu Takahashi (Chiba university)
B2-2	A Method for Increasing Positioning Opportunities in a UWB Positioning System	Shusaku Umeda (Mitsubishi Electric Corp.), Akinori Taira (Mitsubishi Electric Corp.), Akira Kurita (Mitsubishi Electric Corp.), Hiroyasu Sano (Mitsubishi Electric Corp.)
B2-3	Basic study on 3D undersea position estimation using curved surfaces by machine learning	Shinnosuke Sakaya (Chiba University), Masaharu Takahashi (Chiba University)
B2-4	2 Dimensional Location Estimation Applying Machine Learning Using Multiple Items of Sensed Information in Indoor Environments	Eisuke Kudoh (Tohoku Institute of Technology), Haruki Konno (Tohoku Institute of Technology)
B2-5	A Study on Denoising Method Using Deep Image Prior for Radar Signal Processing	Koji Endo (Keio University), Kohei Yamamoto (Keio University), Tomoaki Ohtsuki (Keio University)

Session C1 Security and Reliability		Chair: Takeru Inoue (NTT)
C1-3	A Study on Privacy Protection in ICN Networks using Multiple Encryption Keys	Toru Hasegawa (Osaka University), Shota Yamada (Osaka University), Yuki Koizumi (Osaka University)
C1-1	A new study on cascading failures in power networks	Kei Shimizu (Tokyo City University), Masahiro Hayashi (Tokyo City University)
C1-2	Simulation evaluation of RPKI deployment based on cost-benefit analysis	Tatsuya Oryu (International Christian University), Keisuke Ishibashi (International Christian University)
C1-4	Privacy-Protective Distributed Machine Learning Using Rich Clients	Saki Takano (Ochanomizu University), Akihiro Nakao (the University of Tokyo), Saneyasu Yamaguchi (Kogakuin University), Masato Oguchi (Ochanomizu University)
C1-5	Advanced Zero Trust Architecture for automating fine-grained access control with generalized attribute relation extraction	Nakul Ghate (NEC Corporation), Shohei Mitani (NEC Corporation), Taniya Singh (NEC Corporation), Hirofumi Ueda (NEC Corporation)

Session D2: Sensing I		Chair: Takeshi Amishima (Mitsubishi Electric Corporation)
D2-1	An Experimental Study Obstacles Detection Based on Group Tracking Method and SNR with mm-Wave Radar Supporting Safe of Bicycle Riding in Urban Bicycle-dedicated Lane	Kazuyuki Hirai (Nihon University), Yaokun Hu (Nihon University), Takeshi Toda (Nihon University)
D2-2	Material Identification of Moving Objects by Wi-Fi Sensing Using Machine Learning	Yuan Tian (Sophia University), Masakatsu Ogawa (Sophia University)
D2-3	Experimental study on indoor UWB localization reducing decision errors of NLOS sensors with different sensor environments	Zimu Wang (Meiji University), Yi Lan (Meiji University), Tetsushi Ikegami (Meiji University)
D2-4	Supervised machine learning regression to minutely intense rainfall using GNSS zenith total delay and meteorological sensor	Yutaka Nakagawa (Nara Institute of Science and Technology (NAIST)), Taiki Miyauchi (Nara Institute of Science and Technology (NAIST)), Takeshi Higashino (Nara Institute of Science and Technology (NAIST)), Minoru Okada (Nara Institute of Science and Technology (NAIST))