

Session Title:	[Tu1A] Optical Neural Network
Session Date:	August 6 (Tue.), 2024
Session Time:	11:00-12:30
Session Room:	Room A (102-103)
Session Chair(s)	Prof. Seungyeol Lee (Kyungpook Nat'l Univ., Korea)

[Tu1A-1] [Invited] 11:00-11:30

Programmable Photonics using Dynamically Modulated Coupled Resonances

Xianji Piao (The Univ. of Seoul, Korea)

[Tu1A-2] 11:30-11:45

Single-Shot Matrix-Matrix Multiplication via Hyperspectral Compute-In-Memory

Byoung Jun Park (Korea Univ., Korea), Mostafa Honari Latifpour (City Univ. of New York, USA), Yoshihisa Yamamoto, and Myoung-Gyun Suh (NTT Research Inc., USA)

[Tu1A-3] 11:45-12:00

Optical Random Neural Networks with Genetic Programming

Bora Carpinlioglu, Bahrem Serhat Danis, and Ugur Tegin (Koc Univ., Turkey)

[Tu1A-4] 12:00-12:15

Attention Mechanism-based Joint Fiber Event Identification and Location Using Monitoring Data in ϕ -OTDR System

Yuhang Zhou (Beijing Univ. of Posts and Telecommunications, China), Yi Ding (China Telecom Research Inst., China), Zhiquan Gu (Beijing Univ. of Posts and Telecommunications, China), Xia Gao, Qian Hu (China Telecom Research Inst., China), Jiawei Zhang, Rentao Gu, and Yuefeng Ji (Beijing Univ. of Posts and Telecommunications, China)

[Tu1A-5] 12:15-12:30

Multi-layer Nonlinear Lensless Opto-electrical Neural Network with Quantum Dot Activation

Wanxin Shi (China Mobile Research Inst., China), Zheng Huang (Beijing Nat'l Research Center for Information Science and Tech. of Tsinghua Univ., China), Xi Jiang, Xue Li (Beijing Inst. of Tech., China), Yuyang Han, Sigang Yang (Beijing Nat'l Research Center for Information Science and Tech. of Tsinghua Univ., China), Haizheng Zhong (Beijing Inst. of Tech., China), and Hongwei Chen (Beijing Nat'l Research Center for Information Science and Tech. of Tsinghua Univ., China)