

Session Title:	[Th2A] Machine Learning for Light Wave Technology
Session Date:	August 8 (Thu.), 2024
Session Time:	16:00-17:30
Session Room:	Room A (102-103)
Session Chairs	Prof. Hwi Kim (Korea Univ., Korea)

[Th2A-1] [Invited] 16:00-16:30

Exploring Wave Phenomena with Various Neural Network Models

Jonghwa Shin, Myungjoon Kim, and Arthur Baucour (KAIST, Korea)

[Th2A-2] 16:30-16:45

Generation of a Synthetic Database for Dual-point Fiber Sensor based on a Machine Learning Algorithm

Jonathan Esquivel-Hernández, Rodolfo Martínez-Manuel, and Luis M. Valentín-Coronado (Centro de Investigaciones en Óptica, Mexico)

[Th2A-3] 16:45-17:00

Optimization of Few-Mode Nanostructured Fibers with Generative Inverse Design Networks

Maciej Napiorkowski (Lukasiewicz Research Network, Poland), Rafal Kasztelanic, and Ryszard Buczynski (Wroclaw Univ. of Science and Tech., Poland)

[Th2A-4] 17:00-17:15

High Accuracy Vibration Sensing by using Random Interval Forest Classifier based Distributed Fiber Sensing

Brian Pamukti, Wang Zi, Shien-Kuei Liaw (Nat'l Taiwan Univ. of Science and Tech., Taiwan), Ya-Mei Yang (Industrial Tech. Research Inst., Taiwan), Totok Soehartanto, and Agus Muhamad Hatta (Institut Teknologi Sepuluh Nopember, Indonesia)

[Th2A-5] 17:15-17:30

Image Reconstruction on Electromagnetic Simulation by Using a Recurrent Neural Network

Hiroshi Fukuda (Chitose Inst. of Science and Tech., Japan)