## **External Awards**

#### **Achievement Award**

**Winner:** Koyo Nitta, NTT Device Innovation Center; Ken Nakamura, NTT Media Intelligence Laboratories; Takayuki Onishi, NTT Media Intelligence Laboratories

Date: June 1, 2017

**Organization:** The Institute of Electronics, Information and Communication Engineers (IEICE)

For their contribution to the development and practical application of MPEG-2/H.264/H.265 codecs.

## **MIRU Excellent Paper Award**

Winner: Kota Yamaguchi, CyberAgent, Inc.; Takayuki Okatani, Tohoku University; Takayuki Umeda and Kazuhiko Murasaki, NTT Media Intelligence Laboratories; Kyoko Sudo, Toho University

Date: August 9, 2017

**Organization:** The 20th Meeting on Image Recognition and Understanding (MIRU2017)

For "End-to-end Learning Potentials for Structured Attribute Prediction."

**Published as:** K. Yamaguchi, T. Okatani, T. Umeda, K. Murasaki, and K. Sudo, "End-to-end Learning Potentials for Structured Attribute Prediction," MIRU2017, OS2-1, Hiroshima, Japan, Aug. 2017.

### **Best Paper Award**

**Winner:** Munekazu Date, Hiroshi Fujii, and Hideaki Kimata, NTT Media Intelligence Laboratories

Date: August 31, 2017

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Organization: The 9th International Conference on 3D Systems and

Applications (3DSA 2017)

For "Full Parallax Visually Equivalent Light Field 3D Display Using Linear Blending."

**Published as:** M. Date, H. Fujii, and H. Kimata, "Full Parallax Visually Equivalent Light Field 3D Display Using Linear Blending," Proc. of 3DSA 2017, Digest version, p. 521, Busan, South Korea, Aug. 2017.

## IEICE 100-Year Memorial Paper Award Competition, Best Paper Award

Winner: Seishi Takamura, NTT Media Intelligence Laboratories

**Date:** September 15, 2017 **Organization:** IEICE

For "The Future of All Nature Simulation by Machine." **Published as:** S. Takamura, "The Future of All Nature Simulation by Machine," J. IEICE, Vol. 100, No. 12, Dec. 2017 (in Japanese).

#### IEC 1906 Award

Winner: Makoto Shimokozono, NTT Device Technology Laboratories

Date: October 23, 2017

Organization: International Electrotechnical Commission (IEC)

For his role as a key project leader in IEC TC 86/SC 86C/WG3 and WG4, where he guided two projects on optical amplifiers (IEC 61291-2) and on laser modules for telecommunication (IEC 62572-3) to publication. As secretary of WG4, he demonstrated his excellent technical and organizational skills.

# Papers Published in Technical Journals and Conference Proceedings

## Design of a Temporary Optical Coupler Using Fiber Bending for Traffic Monitoring

T. Uematsu, H. Hirota, T. Kawano, T. Kiyokura, and T. Manabe IEEE Photonics Journal, Vol. 9, No. 6, December 2017.

We designed a temporary optical coupler that extracts 1.25-Gbps optical signals for traffic monitoring. The temporary optical coupler employs a fiber bending technique that uses a receiving fiber to receive leaked signal light from a bent fiber. We optimize the bending condition and the receiving fiber to obtain a high extraction efficiency

while keeping the bending loss below 2 dB. We also measure the bit error rates for the 1.25-Gbps signals and reveal that our temporary optical coupler extracts the 1.25-Gbps optical signals without any deterioration in signal quality. Finally, we confirm experimentally that we achieved traffic monitoring using a traffic monitoring system and our temporary optical coupler in a fiber-to-the-home access network system based on a gigabit Ethernet passive optical network.

NTT Technical Review