

External Awards

SG13 Fellow

Winner: Yoshinori Goto, NTT Network Technology Laboratories

Date: October 25, 2019

Organization: International Telecommunication Union - Telecommunication Standardization Sector (ITU-T) Study Group (SG) 13

Mr. Goto has served ITU-T SG13 for many years. He has been vice chairman of SG13 since he was elected at the World Telecommunication Standardization Assembly (WTSA) in 2012. Through his extraordinary commitment and expertise, he has been successfully managing Working Party 2 of SG13, which includes all activities of the SG related to cloud computing and big data. Furthermore, he has significantly supported the SG13 chairman in managing the SG by leading important ad hoc groups related to the preparation of SG13 for the next study period as well as in creating ITU-T Focus Groups under the partnership of SG13. He demonstrated his high managerial and negotiation skills when leading activities in SG13.

Certificate of Service

Winner: Seishi Takamura, NTT Media Intelligence Laboratories

Date: November 14, 2019

Organization: Picture Coding Symposium

For his contributions as an organizing committee member and session chair.

Network Slicing Implementation 2019 Award

Winner: Takuya Tojo, Hiroki Baba, Shiku Hirai, NTT Network Technology Laboratories; Soushirou Abe, Mitsuo Amasaka, Tomohiro Okada, Kazuto Toyozumi, Takayuki Nakamura, Masaya Nakouji, Aki Fukuda, Masashi Funada, Akira Matsuda, NTT Network Service Systems Laboratories, Yuuki Sakaue, Tatsuya Fukui, NTT Access Network Service Systems Laboratories

Date: November 21, 2019

Organization: MEF (Metro Ethernet Forum)

For “5G xHaul Sharing as Slices with LSO Orchestration.”

Best Paper

Winner: Xiaoxi Zhang, Machiko Shinozuka, Yuriko Tanaka, NTT Network Technology Laboratories; Yuko Kanamori, Toshihiko Masui, National Institute for Environmental Studies

Date: November 27, 2019

Organization: The 11th International Symposium on Environmentally Conscious Design and Inverse Manufacturing (EcoDesign 2019)

For “Forecast of Future Impacts of Using ICT Services on GHG Emissions Reduction and GDP Growth in Japan.”

Published as: X. Zhang, M. Shinozuka, Y. Tanaka, Y. Kanamori, and T. Masui, “Forecast of Future Impacts of Using ICT Services on GHG Emissions Reduction and GDP Growth in Japan,” Proc. of EcoDesign 2019, pp. 88–95, Yokohama, Japan, Nov. 2019.

Best Paper Runner Up

Winner: Seishi Takamura, Media Intelligence Laboratories; Atsushi

Shimizu, NTT TechnoCross Corporation

Date: November 27, 2019

Organization: 2019 IEEE International Conference on Visual Communications and Image Processing (VCIP 2019)

For “Water-bottom Video Coding Based on Coding-oriented Reference Frame Generation.”

Published as: S. Takamura and A. Shimizu, “Water-bottom Video Coding Based on Coding-oriented Reference Frame Generation,” Proc. of VCIP 2019, Sydney, Australia, Dec. 2019.

Best Research Paper Award

Winner: Ryo Ishizuka, Hironori Washizaki, Yoshiaki Fukazawa, Waseda University; Shinobu Saito, Saori Ouji, NTT Software Innovation Center

Date: December 14, 2019

Organization: The 10th International Workshop on Empirical Software Engineering in Practice (IWESEP 2019)

For “Categorizing and Visualizing Issue Tickets to Better Understand the Features Implemented in Existing Software Systems.”

Published as: R. Ishizuka, H. Washizaki, Y. Fukazawa, S. Saito, and S. Ouji, “Categorizing and Visualizing Issue Tickets to Better Understand the Features Implemented in Existing Software Systems,” Proc. of IWESEP 2019, Tokyo, Japan, Dec. 2019.

2019 IEICE Communications Society OCS Young Researchers Award

Winner: Hiroki Taniguchi, NTT Network Innovation Laboratories

Date: December 17, 2019

Organization: The Institute of Electronics, Information and Communication Engineers (IEICE) Communications Society Technical Committee on Optical Communication Systems (OCS)

For “255-Gb/s PAM-8 O-band Transmission Using MLSE Based on Nonlinear Channel Estimation with 20-GHz Bandwidth Limitation.”

Published as: H. Taniguchi, S. Yamamoto, M. Nakamura, and Y. Kisaka, “255-Gb/s PAM-8 O-band Transmission Using MLSE Based on Nonlinear Channel Estimation with 20-GHz Bandwidth Limitation,” IEICE Tech. Rep., Vol. 119, No. 93, OCS2019-18, pp. 43–46, June 2019.

IDW '19 Best Paper Award

Winner: Munekazu Date, Shinya Shimizu, Hideaki Kimata, NTT Media Intelligence Laboratories

Date: December 24, 2019

Organization: The 26th International Display Workshops (IDW '19)

For “Depth Range Control in Visually Equivalent Light Field 3D (VELF3D).”

Published as: M. Date, S. Shimizu, and H. Kimata, “Depth Range Control in Visually Equivalent Light Field 3D (VELF3D),” Proc. of IDW '19, Vol. 26, pp. 65–68, 3DSA3/3D3-1, Sapporo, Japan, Dec. 2019.

Papers Published in Technical Journals and Conference Proceedings

Maximum Entropy Method without False Peaks with Exact Numerical Equation

F. Ishiyama

Journal of Physics: Conference Series, Vol. 1438 (Proc. of CCISP 2019, Phuket, Thailand, Nov. 2019), 012031, January 2020.

The standard numerical maximum entropy method (MEM) still uses the Yule-Walker equation, which contains rough approximation by Walker. The commonly used numerical equation contains additional modifications to reduce calculation cost. We now have powerful computers, so there is no reason to use this modified equation. We argue that the drawbacks of MEM, such as false peaks and peak splitting, are from these modifications. They do not appear when using the exact numerical equation, even a given time series is fractional.

Verifying Commuting Quantum Computations via Fidelity Estimation of Weighted Graph States

M. Hayashi and Y. Takeuchi

Proc. of Quantum Information Processing Conference 2020, Shenzhen, China, January 2020.

We proposed methods for verifying whether a weighted graph state, which is a useful resource state for quantum computing, can be faithfully prepared. We also applied our methods to verify quantum supremacy demonstrations.
