External Awards

IEEE Communications Society, 2012 International Communications Quality and Reliability (CQR) Workshop Best Paper Award

Winners: Daisuke Murayama, Noriyuki Oota, Ken-Ichi Suzuki, and Naoto Yoshimoto, NTT Access Network Service Systems Laboratories
Date: May 16, 2012
Organization: IEEE Communications Society Communications Quality and Reliability (CQR) Workshop

For "Low Latency Dynamic Bandwidth Allocation for 100km Long Reach 10G-EPON".

We propose a new dynamic bandwidth allocation (DBA) method for long-reach passive optical networks (PONs) that can shorten upstream latency. In this method, the optical line terminal (OLT) allocates bandwidth to long-distance (up to 100 km) optical network units (ONUs) preliminarily and shortens the latency of long-distance ONUs. We confirmed the effects experimentally.

Published as: D. Murayama, N. Oota, K-I. Suzuki, and N. Yoshimoto, "Low Latency Dynamic Bandwidth Allocation for 100km Long Reach 10G-EPON," Proc. of 2012 International Communications Quality and Reliability Workshop (CQR2012), San Diego, USA, 2012.

ITU Certificate of Appreciation

Winner: Yoshinori Goto, NTT Service Integration Laboratories
Date: June, 2012
Organization: International Telecommunication Union (ITU)

In recognition of the contribution to ITU-T Study Group 13 standardization activities and the excellent work performed by Yoshinori Goto as Associate Rapporteur for Question 1/13 during 2011, Associate Rapporteur for Question 5/13 during 2009–2010, Rapporteur for Question 5/13 during 2011–2012 and Rapporteur for Question 25/13 during 2011–2012.

Fifth International Conference on Optical, Optoelectronic and Photonic Materials and Applications Poster Paper Award

Winners: Hiroshi Kudo[†1], Yohei Ogawa[†1], Takasumi Tanabe[†1], and Atsushi Yokoo[†2]
†1 Keio University
†2 NTT Basic Research Laboratories
Date: June 3, 2012
Organization: International Conference on Optical, Optoelectronic and Photonic Materials and Applications

For "Fabrication of whispering gallery mode cavities using crystal growth".

Laser-heated pedestal growth (LHPG) was applied for the first time ever to form whispering gallery mode (WGM) microcavities on a sapphire rod. By controlling the feeding and pulling speed during the seeded crystal growth method, we could obtain a WGM cavity configuration with a smooth surface on the sapphire rod. Optical measurement revealed that the cavity has a Q-factor of 350.

IEEE Communications Society, 2012 IEEE International Conference on Communications (ICC) Symposium Best Paper Award

Winners: Ryogo Kubo[†1], Masashi Tadokoro[†2], Hiroko Nomura[†2], Hirotaka Ujikawa[†2], Susumu Nishihara[†2], Ken-Ichi Suzuki[†2], and Naoto Yoshimoto[†2]
†1 Department of Electronics and Electrical Engineering, Keio University
†2 NTT Access Network Service Systems Laboratories
Date: June 13, 2012
Organization: IEEE International Conference on Communications (ICC)

For "Bandwidth Scheduling Techniques in TDM-PON Supporting Inter-ONU Communication with Network Coding for Smart Grid Applications".

Applying network coding (NC) techniques to the traffic between optical network units (ONUs) will improve throughput, security, and reliability. This paper proposes a novel bandwidth scheduling technique to reduce the additional queuing delay at the optical line terminal (OLT).

Published as: R. Kubo, M. Tadokoro, H. Nomura, H. Ujikawa, S. Nishihara, K-I. Suzuki, and N. Yoshimoto, "Bandwidth Scheduling Techniques in TDM-PON Supporting Inter-ONU Communication with Network Coding for Smart Grid Applications," Proc. of the 2012 International Conference on Communications Symposium (ICC2012), Ottawa, Canada, 2012.

Prize of the Commissioner of the Japan Patent Office at the 2012 National Commendation for Invention

Winners: Masahito Tomizawa[†1], Yoshiaki Kisaka[†1], Yutaka Miyamoto[†1], Takashi Ono[†1], and Hiromu Toba[†2]
†1 NTT Network Innovation Laboratories
†2 NTT Electronics Corporation
Date: June 19, 2012
Organization: The Japan Institute of Invention and Innovation

For "Efficient Mapping and Time Division Multiplexing for Large Capacity Optical Transport Networks (OTNs)".

Research Award

Winners: Tatsuya Mori, Kazumichi Sato, Yosuke Takahashi, Tatsuaki Kimura, and Keisuke Ishibashi, NTT Service Integration Laboratories
Date: June 19, 2012
Organization: IEICE Internet Architecture Research Committee

For "Combining the outcomes of IP reputation services".

Internet protocol (IP) reputation systems establish a service that provides us with the "reputation" of IP addresses, primarily on the basis of past measurement. For instance, several domain name system block list (DNSBL) services provide a list of IP addresses published through the DNS; i.e., they return the negative reputation for IP addresses as potential origins of e-mail spam messages. As there are a lot of independent DNSBL services available on the Internet, it is crucial to combine the outcomes of those reputation systems. This paper provides simple methods that attempt to extract accurate decisions based on multiple outcomes of IP reputation systems. Using e-mail delivery logs collected at an medium-scale enterprise network, we evaluate the effectiveness of the approaches and compare their advantages and disadvantages.

Published as: T. Mori, K. Sato, Y. Takahashi, T. Kimura, and K. Ishibashi, "Combining the outcomes of IP reputation services," IEICE Tech. Rep., Vol. 111, No. 81, IA2011-1, pp. 1–6, 2011.