## **External Awards**

#### Outstanding Catalyst Depicting Business Assurance Awareness

**Winner:** Skynet catalyst program (The member includes Kenichi Tayama, Shingo Horiuchi, and Chao Wu, NTT Access Network Service Systems Laboratories.)

Date: May 16, 2019
Organization: TM Forum

For "Skynet Catalyst proof of concept (PoC)."

The Skynet is a TM Forum catalyst project and it aims for an end-to-end service orchestration and monetization on a 5G network slice in hybrid network for large enterprises with multiple global locations. Its catalyst champions include BT, Chunghwa Telecom, Deutsche Telekom, Du, NTT Group, Orange, Verizon, Vodafone, Telenet Group, Telecom Italia, and Telus. Participants include Amartus, BearingPoint, Ericsson, EXFO, Infosys, and RIFT. At Digital Transformation World 2019, Skynet demonstrated PoC operation of remote medical services using a network resource management technology prototype.

#### **Best Paper Award**

Winner: Yousuke Takahashi, NTT Network Technology Laboratories; Keisuke Ishibashi, International Christian University; Masayuki Tsujino, NTT Network Technology Laboratories; Noriaki Kamiyama, Fukuoka University; Kohei Shiomoto, Tokyo City University; Tatsuya Otoshi, Yuichi Ohsita, and Masayuki Murata, Osaka University

Date: June 6, 2019

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

For "Separating Predictable and Unpredictable Flows via Dynamic Flow Mining for Effective Traffic Engineering."

**Published as:** Y. Takahashi, K. Ishibashi, M. Tsujino, N. Kamiyama, K. Shiomoto, T. Otoshi, Y. Ohsita, and M. Murata, "Separating Predictable and Unpredictable Flows via Dynamic Flow Mining for Effective Traffic Engineering," IEICE Trans. Commun., Vol. E101-B, No. 2, pp. 538–547, 2018.

#### **Best Paper Award**

Winner: Ryo Kikuchi, NTT Secure Platform Laboratories; Nuttapong Attrapadung, National Institute of Advanced Industrial Science and Technology; Koki Hamada and Dai Ikarashi, NTT Secure Platform Laboratories; Ai Ishida, Takahiro Matsuda, Yusuke Sakai, and Jacob C. N. Schuldt, National Institute of Advanced Industrial Science and Technology

**Date:** July 4, 2019

**Organization:** The 24th Australasian Conference on Information Security and Privacy (ACISP) 2019

For "Field Extension in Secret-shared Form and Its Applications to Efficient Secure Computation."

**Published as:** R. Kikuchi, N. Attrapadung, K. Hamada, D. Ikarashi, A. Ishida, T. Matsuda, Y. Sakai, and J. C. N. Schuldt, "Field Extension in Secret-shared Form and Its Applications to Efficient Secure Computation," ACISP 2019, Christchurch, New Zealand, pp. 343–361, July 2019.

#### **Best Paper Award**

Winner: Yuto Sagae, Takashi Matsui, and Kazuhide Nakajima, NTT Access Network Service Systems Laboratories

Date: July 10, 2019

**Organization:** The 24th OptoElectronics and Communications Conference (OECC 2019)

For "Ultra-low-XT Multi-core Fiber with Standard 125- $\mu m$  Cladding for Long-haul Transmission."

**Published as:** Y. Sagae, T. Matsui, and K. Nakajima, "Ultra-low-XT Multi-core Fiber with Standard 125-μm Cladding for Long-haul Transmission," OECC 2019, Fukuoka, Japan, July 2019.

#### **Best Paper Award**

Winner: Sayaka Yagi, Kimio Tsuchikawa, and Kohji Tsuji, NTT Access Network Service Systems Laboratories

Date: July 18, 2019

**Organization:** 23rd International Conference Information Visualisation

For "A Heatmap-based Visualization Technique for Finding Operational Problems."

**Published as:** S. Yagi, K. Tsuchikawa, and K. Tsuji, "A Heatmapbased Visualization Technique for Finding Operational Problems," 23rd International Conference Information Visualisation (IV19) -Part II, pp. 110–115, Adelaide, Australia, July 2019.

### Technical Committee on Communication Quality Best Research Award

**Winner:** Takuto Kimura, NTT Network Technology Laboratories; Tatsuaki Kimura, Osaka University; Arifumi Matsumoto and Jun Okamoto, NTT Network Technology Laboratories

Date: July 18, 2019

**Organization:** IEICE Technical Committee on Communication Ouality

For "Video Engagement Control with Bayesian Optimization." **Published as:** T. Kimura, T. Kimura, A. Matsumoto, and J. Okamoto, "Video Engagement Control with Bayesian Optimization," IEICE Tech. Rep., Vol. 118, No. 503, CQ2018-100, pp. 43–48, 2019.

# Papers Published in Technical Journals and Conference Proceedings

## Women in Security: Building a Female InfoSec Community in Korea, Japan, and Taiwan

S. Kang, A. Nakajima, and H. Yen

Black Hat USA 2019, Las Vegas, NV, USA, August 2019.

The information security industry has historically been a male-dominated field, and today, unfortunately, this situation has not changed much. Indeed, the survey conducted by Frost & Sullivan in 2017 concluded that women represented only 11% of the current information security workforce. While more women are expected to join the information security industry to reach new levels of innovation, still, it is difficult to increase their number because women face

many obstacles, such as stereotype bias. One way to bridge this gap is a female community, which can support and motivate women, and produce more role models. In this talk, we will introduce three representative Asian female communities, Power of XX, CTF for GIRLS, and HITCON GIRLS, which were established in Korea, Japan, and Taiwan, respectively. We will first explain how we build and maintain each female community and then go into the details of how we tackled various challenges, such as building a sustainable community and attracting and retaining new members.