SICE2019 Award Finalists and Winner

International Award

Basic Technology Award (BA)

| | ID | Title | Author |
|---------------|-------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Winner | ThA03.3 | Topological Controllability of Undirected Networks of Diffusively-Coupled Agents | Kwon Seong-Ho |
| | FrB06.4 | A Big Data based Approach to Chance Constrained Problems using Weighted Stratified Sampling and Differential Evolution | Tagawa, Kiyoharu |
| | FrC04.2 | On a New Class of Structurally Balanced Graphs for Scaled Group Consensus | Hanada, Kenta |
| | Application | n Award (AP) | |
| | ID | Title | Author |
| Winner | ThB04.2 | A Measurement System for Skill Evaluation of Laparoscopic Surgical Procedures | Ebina, Koki |
| | FrB01.3 | The Optimal Coordination of Connected and Automated Vehicles at Roundabouts | Bakibillah, A S M |
| | FrC02.4 | Development and Evaluation of a Kinect-Based Motion Recognition System Based on Kalman Filter for Upper-Limb Assistive Device | Liao, Yun-Ting |

Young Author's Award

| | ID | Title | Author |
|---------------|---------|---------------------------------------------------------------------------------------------|-------------------|
| Winner | WeA03.2 | Unconstrained Monitoring of Pulse Pressure Waves from the Surface of the Subject's Back | Mito, Akihisa |
| | WeC03.4 | Contouring Control Consensus for Robot Manipulators | chen, ruishuang |
| | ThB02.1 | Dynamics Modeling of Necessary Quantity of Relief Supplies in Large-Scale Disasters | Kai, Shizuku |
| | FrA08.3 | Biomolecular Switch Circuits for Molecular Robots using a DNA Strand Displacement Mechanism | Watanabe, Keisuke |

Poster Presentation Award

| | ID | Title | Author |
|--------|-----------|------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Winner | ThAPo04.3 | Saliency Map Extraction in Human Crowd RGB Data | Nguyen, Minh Tri |
| | ThAPo04.2 | Validity of Inertial Measurement Units in Assessing Segment Angles and Mechanical Energies of Elderly Persons During Sit-To-Stand Motion | Hanawa, Hiroki |
| | ThAPo03.2 | Noncontact Pulse Wave Detection Technique Using Micro-Spectrometer | Takahashi, Yukio |
| | ThAPo01.6 | State Estimation by Observer Using Median Operation for Observed Output with Outliers | Okajima, Hiroshi |
| | ThAPo01.7 | Basic Idea of Periodically Time-Varying Dynamic Quantizer in Networked Control Systems | Okajima, Hiroshi |
| | ThAPo02.1 | Performance Assessment of Primary Frequency Regulation Based on Static Characteristics | Gao, Song |
| | ThAPo06.4 | An Intuitive Risk Information Display Via Skin for Wearable Devices | Kaiho, Yoshiyuki |
| | ThAPo04.7 | Sway Angle Estimation on Crawler Cranes with Acoustic Signal Processing | Horie, Naoki |
| | ThAPo06.6 | Kriging Interpolation for Vapor Pressure Deficit in Plant Factory with Solar Light | Koga, Takashi |
| | ThAPo03.3 | Sensory Attenuation Characteristics for Periodic Force Variation | Nuruki, Atsuo |

Student Travel Grant Award (STGA)

| | | Title | Author |
|--------|---------|--------------------------------------------------------------------------------------------------|---------------------|
| Winner | FrB08.2 | Detection of P-Wave Onset in Seismic Signals Using Wavelet Packet Transform | Kanchan Aggarwal |
| Winner | FrB01.3 | The Optimal Coordination of Connected and Automated Vehicles at Roundabouts | A. S. M. Bakibillah |
| Winner | WeC08.7 | Predictive Guidance and Control for Astrobee Robots Operating in the International Space Station | Isaac Kassim |