The 7th International Symposium on Brainware LSI

March 31, 2021

Online

Sponsored by RIEC Collaboration Project Research (PJ#: H29/B17) and Brainware LSI Project, RIEC, Tohoku University, Japan.

Tentative Program

* All in JST (UTC+9)

10:30-10:45   **Opening remarks**

10:45-11:10   **Stochastic Computing for Edge Intelligence**

        Warren J. Gross (McGill University, Canada)

11:10-11:35   **A Genetically Encoded Autonomous Bioluminescent Voltage Indicator for Neural Imaging**

        Luke Theogarajan (UC Santa Barbara, USA)

11:35-12:00   **Auditory brain models for the localization and identification of sound**

        César D. Salvador (Perception R&D, Lima, Peru)

12:00-13:30   Lunch

13:30-13:55   **Trend of IoT and 5G Edge Computing**

        Norikatsu Takaura (Hitachi, Ltd., Japan)

13:55-14:20   **Practical and Mathematical investigation for bio-sonar strategy of bats**

        Yasufumi Yamada (Hiroshima University, Japan)

14:20-14:45   **Hierarchical Decentralized Control Mechanism Underlying Brittle Stars' Locomotion**

        Takeshi Kano (Tohoku University, Japan)

14:45-15:10   **The visual attention at the hand-movement goal**

        Wei Wu (Tohoku University, Japan)

15:10-15:25   Break

15:25-15:50   **Analog CMOS Neural Network for Edge Computing**

        Shigeo Sato (Tohoku University, Japan)

15:50-16:15   **In-Hardware Training Chip Based on CMOS Invertible Logic for Machine Learning**

        Naoya Onizawa (Tohoku University, Japan)

16:15-16:40   **Capacity of fully binarized convolutional neural network**

        Martin Lukac (School of Science and Technology, Nazarbayev University, Kazakhstan)

16:40-16:55   Break

16:55-17:20   **Prefiltering Using Reflectionless Transmission-Line Model for Speech Recognition in Noise Environment**

        Takemori Orima (Tohoku University, Japan)

17:20-17:45   **Comparison of the effect of auditory spatial attention in front and back space**

        Ryo Teraoka (Kumamoto University, Japan)

17:45-18:10   **Enhancement and suppression in selective visual attention**

        Søren K. Andersen (University of Aberdeen, UK)

18:10-18:15   **Closing remarks**