Joint Workshop of IEIE JB and IEEE Shin-etsu SSB

In conjuction with the 5th Workshop on Electronics and Information Engineering (WEIE 2019)

Dec. 12 (THU) - 13 (FRI), 2019

Tokimeito (Niigata University Satellite Campus)

About

The Workshop on Electronics and Information Engineering (WEIE) sponsored by Japan Branch of the Institutes of Electronics and Information Engineers (IEIE JB), Korea is annually held aiming at promoting research and collaboration among members of IEIE JB. The topics include Brain Machine Interface, Mobile Communication Technology, Service Computing and Big Data, but are not limited to them.

In this time, the WEIE is co-organized by the IEIE JB and IEEE Shin-etsu Section Student Branch (SSB) as a joint workshop. The IEEE Shin-etsu SSB composed by Shinshu Univ., Nagaoka Univ. Tech., and Niigata Univ officially started in Jan. 2019, and is actively providing opportunities to exchange various information not limited to research and promote friendship within local community. The students attending this event can enjoy two invited talks and free discussion through poster presentation about his/her recent results.

Program

[Dec. 12 (THU)]

- 13:00 – 14:30 Student Poster Session (Foyer), Chair: Prof. Minseok Kim (Niigata Univ.)
- 14:50 – 15:00 Welcome Address, Prof. Incheon Paik (Aizu Univ.)
- 15:00 – 17:00 Invited Talk Session (Lecture Room A)

[Invited Talk 1] Chair: Prof. Toshihisa Tanaka (Tokyo Univ. Agri. Tech.)

"Image Quality Enhancement on High-Speed Time Domain"
Prof. Jong-Ok Kim
(Korea Univ.)

[Invited Talk 2] Chair: Prof. Isao Nambu (Nagaoka Univ. Tech.)

"Image Restoration with Convolutional Dictionary Learning"
Prof. Shogo Muramatsu
(Niigata Univ.)

- 17:15 – 18:30 Exchange Reception (Lecture Room A)
  - Introduction of IEIE Japan Branch Activities (Prof. Incheon Paik, Aizu Univ., Chair of IEIE JB)
  - Introduction of IEEE Shin-etsu Section Student Branch Activity (Mr. Satoru Yasukawa, Niigata Univ., Vice Chair of IEEE Shin-etsu SSB)
  - Award ceremony (Best poster presentation)
  - Party (Non-alcohol)

[Dec. 13 (FRI)]

- Dec. 13, 10:00—12:00 Technical Tours (Niigata University)

Poster Session

【Group A: 13:00-13:45】

P1. *A New Way of Calculating l2-norm for 2-tuple Array in Fixed-point Arithmetic*
Yuya Kodama, Yuta Yoshida, Shogo Muramatsu, Hiroyoshi Yamada (Niigata Univ.)

P2. *Neural network including alternative preprocessing by transposed convolution*
Kenshi Machida, Isao Nambu, Yasuhiro Wada (Nagaoka Univ. Tech.)

P3. *Comparison on Word Embeddings for Sentiment Classification with Noisy Twitter Data*
Takahiro Yamauchi, Incheon Paik (Univ. Aizu)

P4. *Millimeter-Wave Radio Tomographic Imaging Technique using Multipath Components for Indoor Localization*
Takeshi Tasaki, Minseok Kim, Satoshi Yamakawa (Niigata Univ.)

P5. *Measurement and analysis of ECoG during listening, imagination and vocalization*
Kotaro Hayashi, Shuji Komeiji, Takumi Mithuhashi, Yasushi Imura, Hidenori Sugano, Toshihisa Tanaka (Tokyo Univ. Agri. Tech.)

P6. *River State Estimation by Convolutional-Sparse-Coded Dynamic Mode Decomposition Considering Wave-like Phenomena*
Yusuke Arai, Yuhei Kaneko, Shogo Muramatsu, Hiroyasu Yasuda, Kiyoshi Hayasaka, Yu Otake (Niigata Univ.), Shunsuke Ono (Tokyo Tech.), Masahiro Yukawa (Keio Univ.)

P7. *Deep Learning in medical imaging: Tumor detection from colonoscopy WSI*
Cherubin Mugisha, Incheon Paik (Univ. Aizu)

P8. *Study on Eddy Current Brake for Aircraft Using Composite Disc*
Daichi Mochizuki, Norihiro Sato, Yoshimi Kikuchi, Hiroyuki Wakiwaka, Makoto Sonehara, Toshiro Sato (Shinshu Univ.)

P9. *Experimental Evaluation of WiFi based Indoor Localization*
Satoru Yasukawa, Hideaki Momose, Minseok Kim (Niigata Univ.)

P10. *Detecting Abnormal Period in Epileptic EEG Using Deep Neural Networks*
Taku Shoji, Noboru Yoshida, Kosuke Fukumori, Tomohiko Sakai, Yuichi Tanaka, Toshihisa Tanaka (Tokyo Univ. Agri. Tech.)

P11. *Automatic Deep Learning Architecture Generation using Ontology and Rules*
Ryo Ataka, Incheon Paik (Univ. Aizu)

【Group B: 13:45-14:30】

P12. *A Simple Gaussian Kernel Classifier with Data-driven Hyperparameter Optimization*
Kosuke Fukumori, Toshihisa Tanaka (Tokyo Univ. Agri. Tech.)

P13. *Double-Directional Millimeter-Wave Radio Channel Sounder Incorporating Analog Beamformers*
Shuaiqin Tang, Keiichiro Kumakura, Minseok Kim (Niigata Univ.)

P14. *Muscle synergies of isometric contraction with different speeds*
Tsubasa Sano, Misaki Takeda, Isao Nambu, Yasuhiro Wada (Nagaoka Univ. Tech.)

P15. *Comparison of feature extraction and discrimination methods in Brain-computer Interfaces*
Tomohiro Wakai, Kenshi Machida, Isao Nambu, Yasuhiro Wada (Nagaoka Univ. Tech.)

P16. *Segment initialization method of stripe artifact removal based on Robust PCA for millimeter wave automotive radar image*
Weiwei Shan, Shogo Muramatsu, Akira Oshima, Hiroyoshi Yamada (Niigata Univ.)

P17. *Beta Oscillation in Auditory and Visual Modalities is Related to Sensorimotor Synchronization*
Mami Sasaki, Haruki Okawa, Toshihisa Tanaka (Tokyo Univ. Agri. Tech.)

P18. *Development of Radio Propagation Channel Model for Millimeter-Wave Indoor Multi-Gigabit Access Links*
Satoru Kishimoto, Satoshi Yamakawa, Minseok Kim (Niigata Univ.)

P19. *API Discovery Approach Based on invocation sequence Pre-trained Model*
Kungan Zeng, Incheon Paik (Univ. Aizu)

P20. *Stick-slip suppression system for geared motors with large nonlinear friction caused by oil seals*
Juan Padron, Kiyoshi Ohishi, Yuki Yokokura (Nagaoka Univ. Tech.)

P21. *Introducing Latent Distribution of Refractive Index for OCT Volumetric Data Restoration*
Jikai Li, Masaki Kakihara, Yuta Yoshida, Shogo Muramatsu (Niigata Univ.), Shunsuke Ono (Tokyo Tech.), Samuel Choi, Takeru Ota, Fumiaki Nin, Hiroshi Hibino (Niigata Univ.)

P22. *Automation of Ontology Generation by Transfer learning of Language Model*
Atushi Oba, Incheon Paik (Univ. Aizu)

P23. *Resolving Lexical Ambiguity in English-Japanese Neural Machine Translation*
Incheon Paik, Minh Q. Do, Ty V. Nguyen (Univ. Aizu)

[Notice]

- Poster size: A0 is available.

- All posters (Group A and B) should be installed by 13:00.

- Awards will be presented to some excellent presentations.

Inquiry: Prof. Minseok Kim (Niigata Univ.) (mskim@eng.niigata-u.ac.jp)

IEEE Shin-Etsu Section https://www.ieee-jp.org/section/shin-etsu/index.html

IEIE Japan Branch http://japansection.ieieweb.org/user/index.asp