



Proceedings of 2018 Winter International Symposium on Big-Data, Cybersecurity and IoT

Room 11-17, Graduate School of Information Science and Technology, Hokkaido University

Student Session 1

- ○ *Myat Hsu Aung*, Hiroshi Tsutsui, and Yoshikazu Miyanaga
An Accuracy Evaluation of Fingerprint Database Constructed by Mean-Shift Clustering for WiFi Indoor Positioning Systems
- ○ *Jie Li*, and Matteo Convertino
Taming Network Inference: Optimal Transfer Entropy Model

Student Session 2

- ○ *Shota Shimada*, Hiromichi Hashizume, and Masanori Sugimoto
Visible light positioning using reflected light and a video camera
- ○ *Sheng Xiang*, Yaping Yan, Hirokazu Asano, and Shun'ichi Kaneko
Robust Printing Quality Inspection on SHIBO Surface by Multiple Paired Pixel Consistency of Orientation Codes.

Student Session 3

- ○ *Wenjun Zhou*, Shun'ichi Kaneko, Manabu Hashimoto, Yutaka Satoh, and Dong Liang
Foreground Detection based on Co-occurrence Background Model with Hypothesis on Degradation Modification in Dynamic Scenes
- ○ *Sangeetha Ratnayake*, Toshinori Endo, and Naoki Osada
Understanding the Correlation between Amino Acid Essentialness and Disease Causality

Student Session 4

- ○ *Asahi Matsuda*, Hitoshi Aonuma, Keisuke Naniwa, and Shun'ichi Kaneko
Image-based Measurement of Ultra-fast Movement of Mandible in Trap-jaw Ants
- ○ *Hiroaki Murakami*, Masanori Sugimoto
Smartphone 3-D Localization using Mirror Image Speakers

Student Session 5

- ○ *Prasoon Ambalathankandy*, Masayuki Ikebe
Computer Vision for Bad Weather Photography
- ○ *Weiyang Zhang*, Yu Kadokawa, Akihisa Tomita, and Kazuhisa Ogawa
State preparation robust to the modulator signal degradation by a dual-parallel modulator for high speed BB84 QKD systems

Student Session 6

- ○ *Wataru Noguchi*, Hiroyuki Iizuka, and Masahito Yamamoto
Development of Place and Head-direction cells by Visuomotor Integration and Sparse Coding in Recurrent Neural Network

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Details on Student Session

December 20 (Thurs)

Student Session 1 (60 Minutes) 11:15 – 12:15

Title: An Accuracy Evaluation of Fingerprint Database Constructed by Mean-Shift Clustering for WiFi Indoor Positioning Systems (22 Minutes)

Myat Hsu Aung, Hiroshi Tsutsui, and Yoshikazu Miyanaga

Title: Taming Network Inference: Optimal Transfer Entropy Model (22 Minutes)

Jie Li and Matteo Convertino

General Discussion (15 Minutes)

Student Session 2 (60 Minutes) 14:30 – 15:30

Title: Visible light positioning using reflected light and a video camera (22 Minutes)

Shota Shimada, Hiromichi Hashizume, and Masanori Sugimoto

Title: Robust Printing Quality Inspection on SHIBO Surface by Multiple Paired Pixel Consistency of Orientation Codes (22 Minutes)

Sheng Xiang, Yaping Yan, Hirokazu Asano, and Shun'ichi Kaneko

General Discussion (15 Minutes)

Student Session 3 (45 Minutes) 16:45 – 17:30

Title: Foreground Detection based on Co-occurrence Background Model with Hypothesis on Degradation Modification in Dynamic Scenes (22 Minutes)

Wenjun Zhou, Shun'ichi Kaneko, Manabu Hashimoto, Yutaka Satoh, and Dong Liang

Title: Understanding the Correlation between Amino Acid Essentialness and Disease Causality (22 Minutes)

Sangeetha Ratnayake, Toshinori Endo, and Naoki Osada

December 21 (Fri)

Student Session 4 (60 Minutes) 11:00 – 12:00

Title: Image-based Measurement of Ultra-fast Movement of Mandible in Trap-jaw Ants (22 Minutes)

Asahi Matsuda, Hitoshi Aonuma, Keisuke Naniwa, and Shun'ichi Kaneko

Title: Smartphone 3-D Localization using Mirror Image Speakers (22 Minutes)

Hiroaki Murakami, Masanori Sugimoto

General Discussion (15 Minutes)

Student Session 5 (60 Minutes) 14:30 – 15:30

Title: Computer Vision for Bad Weather Photography (22 Minutes)

Prasoon Ambalathankandy, and Masayuki Ikebe

Title: State preparation robust to the modulation signal degradation by a dual-parallel modulator for high speed BB84 quantum key distribution systems (22 Minutes)

Weiyang Zhang, Yu Kadokawa, Akihisa Tomita, and Kazuhisa Ogawa

General Discussion (15 Minutes)

Student Session 6 (45 Minutes) 16:45 – 17:30

Title: Development of Place and Head-direction cells by Visuomotor Integration and Sparse Coding in Recurrent Neural Network (22 Minutes)

Wataru Noguchi, Hiroyuki Iizuka, and Masahito Yamamoto

General Discussion (23 Minutes)