

# 2019 Summer International Symposium on Big-Data, Cybersecurity and IoT

## Symposium Program

### August 8 (Thurs)

- 09:00 – 09:20 *Opening Address*  
Masanori Kasahara  
Acting President/GI-CoRE Acting Director, Hokkaido University
- Yoshikazu Miyanaga  
Director, Global Station for Big Data and Cybersecurity (GSB)
- 09:20 – 10:20 *Keynote Speech 1*  
“AI Will Change Everything, But Not So Fast”  
Shlomo Zilberstein, University of Massachusetts, Amherst / GI-CoRE GSB
- 10:20 – 10:30 Coffee Break
- 10:30 – 11:30 *Keynote Speech 2*  
“Enabling Technologies for Industry 4.0: Focus on Internet of Things and Cybersecurity”  
Eryk Dutkiewicz, University of Technology Sydney / GI-CoRE GSB
- 11:30 – 11:40 Announcement for Participants
- 11:40 – 13:00 Lunch

### *[Session 1]*

- 13:00 – 13:25 “Membership Inference Attacks Against Machine Learning Models”  
Amir Houmansadr, University of Massachusetts, Amherst / GI-CoRE GSB
- 13:25 – 13:50 “Extraction of Knowledge and Information from Documents”  
Masaharu Yoshioka, Hokkaido University, GI-CoRE GSB
- 13:50 – 14:15 “Visualizing 4-dimensional manifolds via curves on a surface”  
Noriyuki Hamada, University of Massachusetts, Amherst / GI-CoRE GSB
- 14:15 – 14:40 “Crowdsourcing for Big Data Analytics”  
Satoshi Oyama, Hokkaido University, GI-CoRE GSB
- 14:40 – 15:05 “Academics in the Big Data Era: Balancing Research, Industry and Education”  
Richard XU, University of Technology Sydney
- 15:05 – 15:30 “Deep Learning and Big Data for Cognitive Modeling”  
Hiroyuki Iizuka, Hokkaido University, GI-CoRE GSB

15:30 – 15:55 Coffee Break

*[Session 2]*

15:55 – 16:20 “OTFS: A New Modulation Technique for High Mobility Wireless Communications”  
Xiaojing Huang, University of Technology Sydney / GI-CoRE GSB

16:20 – 16:45 “Large-scale signal detection based on belief propagation with node selection”  
Takeo Ohgane, Hokkaido University, GI-CoRE GSB

16:45 – 17:10 “Exploring Internet of Things (IOT) Security vulnerability and  
developing novel mitigation technique”  
Priyadarsi Nanda, University of Technology Sydney / GI-CoRE GSB

17:10 – 17:35 “Ecocentric Model-Technology Nexus for EcoHealth”  
Matteo Convertino, Hokkaido University, GI-CoRE GSB

17:35 – 17:45 Announcement for Participants

18:30 – 20:30 Reception  
Hotel Mystays Sapporo Aspen, 2F, “Aspen B”  
(N8, W5, Kita-ku, Sapporo)

**August 9 (Fri)**

GSB RAs' Sessions

09:00 – 10:20 Student Session 1

10:20 – 10:40 Coffee Break

10:40 – 12:00 Student Session 2

12:00 – 13:30 Lunch

13:30 – 15:10 Student Session 3

15:10 – 15:30 Coffee Break

15:30 – 16:50 Student Session 4

16:50 – 17:00 Closing Remark