Kiban A - Kiban B - NII Collaborative Research Joint Meeting

Support:
- "Learning Relational Dynamics from State Transition"
  JSPS Grant-in-Aid for Scientific Research (A)
- "Research on Robust Team Formation in Dynamic Environments"
  JSPS Grant-in-Aid for Scientific Research (B)
- NII Collaborative Research

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Day : 4-6. March 2018

Venue : IT Business Plaza Musashi (Kensyu Room 2)
14-31, Musashimachi, Kanazawa-shi, Ishikawa
<https://www.bp-musashi.jp/access/>

Hotel : Hotel Trinity Kanazawa
1-18 Musashimachi, Kanazawa-shi, Ishikawa
https://www.tripadvisor.com/g298115-d1502023/

Social dinner : Kuukai (Japanese)
3-10 Kazuemachi, Kanazawa-shi, Ishikawa
http://kuukai-kanazawa.com/
https://www.tripadvisor.com/g298115-d3178752/

Transportation : For people from NII, we plan to use (Hokuriku) Shinkansen. It takes 2.5 or 3 hours from Tokyo to Kanazawa by Kagayaki or Hakutaka Express, respectively. There are 1 or 2 trains per hour. From JR Kanazawa station, it is 10-15 minutes walk to the hotel.

Food : The hotel is very close to the famous market, so you can find many restaurants nearby.

Participant :
Prof. Katsumi Inoue (NII/Sokendai/Tokyo Tech),
Prof. Chiaki Sakama (Wakayama University),
Prof. Taisuke Sato (AIST),
Prof. Morgan Magnin (Ecole central de Nantes),
Prof. Katsutoshi Hirayama (Kobe University),
Assoc. Prof. Tenda Okimoto (Kobe University),
Dr. Nicolas Schwind (AIST),
Dr. Tony Ribeiro (Ecole central de Nantes),
Dr. Kotaro Okazaki (SONAR/Sokendai),
Xinwei Chai (Ecole central de Nantes, NII),
Schedule (4. March)

Getting-Together and Discussion
(18:00 Meet at the lobby of Hotel Trinity Kanazawa)

Schedule (5. March)

10:00-10:20 : “Opening” Katsumi Inoue

Integration of Knowledge Representation and Machine Learning (1)

10:20-11:00 : “Linear algebraic computation of logic programming”
Chiaki Sakama

11:00-11:40 : “Computing stable models via dualized normal logic programs in a vector space”
Taisuke Sato

11:40-12:10 : “An Inverse Problem in Belief Revision”
Nicolas Schwind, Katsumi Inoue, Sébastien Konieczny, Pierre Marquis

12:10-13:00 : Lunch

Learning Relational Dynamics from State Transition (1)

13:00-13:40 : “Learning Delays in Biological Regulatory Networks from Time Series Data: some results and challenges w.r.t. real data”
Morgan Magnin, Emna Ben Abdallah, Tony Ribeiro, Olivier Roux, Katsumi Inoue
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>13:40-14:10</td>
<td>“Inductive Learning of Continuum Dynamics”</td>
<td>Tony Ribeiro, Sophie Tourret, Maxime Folschette, Morgan Magnin, Domenico Borzacchiello, Francisco Chinesta, Olivier Roux, Katsumi Inoue</td>
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<td>14:10-14:40</td>
<td>“Investigate semantics for stochastic LFIT”</td>
<td>Kotaro Okazaki</td>
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<td><strong>Resilient Intelligent Systems (1)</strong></td>
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<td>14:50-15:20</td>
<td>“Payoff Division in MC-nets: Algorithm for $\varepsilon$-Core with Upper Bound Guarantee”</td>
<td>Katsutoshi Hirayama, Jun Akagi, Tenda Okimoto</td>
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<td>16:00-17:00</td>
<td><strong>Discussion</strong></td>
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<td>18:00-</td>
<td><strong>Dinner (Kuukai)</strong></td>
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**Schedule (6. March)**

**Integration of Knowledge Representation and Machine Learning (2)**

(10:00-10:30)
“TBA”
Benjamin Wu, Katsumi Inoue

(10:30-11:00)
“Enhancing SAT Solvers with Machine Learning Techniques”
Junya Yamaguchi, Katsumi Inoue

(11:00-11:20)
“Multiplication, Division and Word Algebra Problems Solved by Neural Programmer-Interpreters”
Shota Katsumata, Katsumi Inoue

**Learning Relational Dynamics from State Transition (2)**

(11:20-11:40)
“Analysis of Attitudes of TV Audiences with Neural Networks”
Junichi Sakuma, Katsumi Inoue

(11:40-12:10)
“An Approach to Reachability Problem via Static Analysis and Answer Set Programming”
Xinwei Chai, Morgan Magnin and Olivier Roux

Lunch (12:10-13:00)

(13:00-13:30)
“Learning Logic Programs with Recurrent Neural Networks”
Yin Jun Phua, Katsumi Inoue

(13:30-14:00)
“Learning Relational Dynamics Using Neural Networks and Other Machine Learning Methods”
Nan Jiang, Katsumi Inoue

(14:00-14:30)
“Learning Delayed Systems Using Recurrent Neural Networks”
Teemu Rintala, Katsumi Inoue

Resilient Intelligent Systems (2)

(14:30-15:00)
“Recoverable Coalition Structure Generation”
Bojana Kodric, Katsumi Inoue

(15:00-15:20)
“Learning Agents’ Models from Their Behaviors”
Guillaume Lorthioir, Katsumi Inoue

Closing (15:20-15:30)
Katsumi Inoue