

REPORT FROM THE JAPANESE CHAPTER

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EATCS-JP/LA Workshop on TCS and Presentation Awards

The 13th *EATCS/LA Workshop on Theoretical Computer Science* was held at Research Institute of Mathematical Sciences, Kyoto University, January 26 to January 28, 2015. (The program also can be found at http://www.is.titech.ac.jp/~mori/LA2015/LA2015winter_program.pdf, but it is written in Japanese...)

By attendees' voting, the following talk by **Prof. Yukiko Yamauchi** (Kyushu University) was selected as the 13th EATCS/LA Presentation Award:

Pattern Formation by Oblivious Synchronous Mobile Robots in the Three Dimensional Space by Yukiko Yamauchi (Kyushu University), Taichi Uehara (Kyushu University), and Masafumi Yamashita (Kyushu University)

The award will be given to her at the Summer LA Symposium held in July 2016.

We also established another presentation award, named "EATCS/LA Student Presentation Award" to encourage students. **Mr. Shuichi Hirahara** (The University of Tokyo) who presented the following paper, was selected as the fifth EATCS/LA Student Presentation Award:

Limits of Minimum Circuit Size Problem as Oracle by Shuichi Hirahara (The University of Tokyo) and Osamu Watanabe (Tokyo Institute of Technology)

The award (with some gift for playing in his laboratory) has been already recognized publicly at the last day, January 28, 2015.

Congratulations!

This workshop is jointly organized with *LA symposium*, Japanese association of theoretical computer scientists. Its purpose is to give a place for discussing topics on all aspects of theoretical computer science. (In fact, I've heard some different opinions that "L" stands for Logic and/or Language, and "A" stands for Algorithm and/or Automaton.) That is, this workshop is an unrefereed familiar meeting. All submissions are accepted for the presentation. There should be no problem of presenting these papers in refereed conferences and/or journals. We hold it

twice a year (January/February, and July/August). If you have a chance, I recommend you to attend it. Check <http://www.ecei.tohoku.ac.jp/alg/EATCS-J/> for further details. You can find the program of the last workshop below.

Program of EATCS-JP/LA workshop on TCS (January 26th to 28th, 2016)

In the following program, “*” indicates ordinary speakers, while “**” indicates student speakers. The number [Sxx] means student session, which consists of shorter talks than the ordinary talks.

- [S1] SUS queries on run-length-encoded string
***Takuya Mieno, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (Kyushu University)*
- [S2] Data structure and algorithm for longest common extension queries
***Yuka Tanimura (Kyushu University), Tomohiro I (Kyushu Institute of Technology), Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (Kyushu University)*
- [S3] Approximate tree distance for a large number of data
***Takumi Yone, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (Kyushu University)*
- [S4] Regret Analysis for Online Binary Search Tree Problems with Switching Costs
***Tadahiro Matsukawa, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (Kyushu University)*
- [1] Pattern Formation by Oblivious Synchronous Mobile Robots in the Three Dimensional Space
**Yukiko Yamauchi (Kyushu University), Taichi Uehara, Masafumi Yamashita (Kyushu University)*
- [2] An efficient data structure for alignments of substrings
**Yoshifumi Sakai (Graduate School of Agricultural Science, Tohoku University)*
- [3] Folding Orthogonal Polygons to Orthogonal Boxes
*Takashi Horiyama, **Koichi Mizunashi (Saitama University)*
- [S5] Online prediction for non-cumulative loss functions
***Wakana Mori, Kohei Hatano, Eiji Takimoto (Kyushu University)*
- [S6] Theory and Practice of Dynamic Graph Algorithms
***Mikiya Imura (Tokyo Institute of Technology)*
- [S7] On repetition factorization of strings.
***Hiroe Inoue, Shyunsuke Inenaga, Hideo Bannai (Kyushu University), Masayuki Takeda (Kyushu University)*
- [S8] Inferring Strings from Lyndon Tree
***Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (Kyushu University)*
- [4] Lower bounds of circuit-size loss for direct-product lemmas
**Akinori Kawachi (Tokushima University)*
- [5] On the Computational Complexity of Counting Gaps in Numerical Semigroups
**Shunichi Matsubara (Aoyama Gakuin University)*
- [6] Limits of Minimum Circuit Size Problem as Oracle
***Shuichi Hirahara (The University of Tokyo), Osamu Watanabe (Tokyo Institute of Technology)*
- [7] Key Dependent Message Security in the Random Oracle Model

- **Fuyuki Kitagawa (Tokyo Institute of Technology, AIST), Takahiro Matsuda, Goichiro Hanaoka (AIST), Keisuke Tanaka (Tokyo Institute of Technology, JST CREST)*
- [8] Selfless Anonymity on Group Signature
***Ai Ishida (Tokyo Institute of Technology/AIST), Keita Emura (NICT), Goichiro Hanaoka, Yusuke Sakai (AIST), Keisuke Tanaka (Tokyo Institute of Technology / JST CREST), Shota Yamada (AIST)*
- [9] On Efficient Correctability of Samplable Errors
**Kenji Yasunaga (Kanazawa University)*
- [S9] Analysis of Black Box Reduction for Circuits
***Ryo Ashida (Tokyo Institute of Technology)*
- [S10] Attribute-Based Encryption from Lattices with Revocation
***Yuuki Sawai, Yuyu Wang (Tokyo Institute of Technology), Keisuke Tanaka (Tokyo Institute of Technology/CREST)*
- [S11] A secure two-party protocol using indistinguishability obfuscators
***Kanako Baba (Tokushima University), Akinori Kawachi*
- [S12] Sliding tokens on unicyclic graphs
***Duc Anh Hoang (JAIST), Ryuhei Uehara (JAIST))*
- [S13] On Left-Right Maximal Generic Words
***Yuta Fujishige, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (Kyushu University)*
- [S14] On abelian square-free strings
***Takafumi Inoue, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (Kyushu University)*
- [10] A revisit of tangles from perspectives of ideals and filters
**Koichi Yamazaki (Gunma University)*
- [11] Approximation of ASPL on graph of diameter 3
***Nobutaka Shimizu, Ryuhei Mori (Tokyo Institute of Technology)*
- [12] What Is a Network Community? A Novel Quality Function and Detection Algorithms
***Atsushi Miyauchi, Yasushi Kawase (Tokyo Institute of Technology)*
- [13] Efficiency of Garbled Circuits for Symmetric Functions
***Hiroyuki Tohyama, Zen Inomata (Tokyo Institute of Technology), Keisuke Tanaka (Tokyo Institute of Technology, JST CREST)*
- [14] A Polynomial-time Algorithm for Checking the Inclusion of Deterministic Restricted One-Counter Transducers Which Accept by Final State
**Mitsuo Wakatsuki, Etsuji Tomita, Tetsuro Nishino (The University of Electro-Communications)*
- [15] A column generation approach for the bus crew scheduling problem
***Yuki Sawai, Yannan Hu, Wei Wu (Nagoya University), Hideki Hashimoto (Tokyo University of Marine Science and Technology), Masaki Kato, Tsutomu Saito (Kozo Keikaku Engineering Inc.), Mutsunori Yagiura (Nagoya University)*
- [S15] Randomized Approximate Counting of the Number of Paths in a Grid Graph
***Yuki Shibata, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (Kyushu University)*
- [S16] Efficient Enumeration of Series-Parallel Graphs
***Atsushi Fujii (JAIST), Ryuhei Uehara (JAIST)*
- [S16] An algorithm for computing minimal absent words

***Yuki Tsujimaru, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (Kyushu University)*

THE JAPANESE CHAPTER

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