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JST ERATO 湊離散構造処理系プロジェクト

2010 年度 発表論文リスト

1. Shin-ichi Minato and Takeaki Uno, “Frequentness-Transition Queries for Distinctive Pattern Mining from Time-Segmented Databases”, Proc. of 2010 SIAM International Conference on Data Mining (SDM’2010), pp. 339-349, April 2010
2. Araki, Hiromichi and Matsubara, Shigeo and Sakurai, Yuko, “Analysis of an Internet auction market where ascending auction and fixed-price selling simultaneously exist”, Proceedings of the WebSci10: Extending the Frontiers of Society On-Line, April 2010
3. Shin-ichi Minato, “Data Mining Using Binary Decision Diagrams”, Progress in Representation of Discrete Functions (Synthesis Lectures on Digital Circuits and Systems), chapter5, pp. 97-109, Morgan & Claypool Publishers, May 2010
4. 津田宏治, “複合ソート法による高速な全ペア類似度検索”, 信学技報 IBISML2010-2, 2010 年 6 月
5. 櫻井 祐子, 横尾 真, “入札者の選好を考慮した検索連動型広告オークションの提案”, 2010 年度 (第 24 回) 人工知能学会全国大会, 2010 年 6 月
6. 石畠正和, 亀谷由隆, 佐藤泰介, 湊 真一, “命題論理に基づく確率モデルのための二分決定グラフと順序符号化を用いた効率的な EM アルゴリズム”, 信学技報, Vol. 110, No. 76, IBISML2010-23, pp. 155-165, 2010 年 7 月
7. Shin-ichi Minato, “Recent and Future Work on Decision Diagrams and Discrete Structure Manipulation,”, Hokkaido University, Division of Computer Science, TCS Technical Reports, TCS-TR-B-10-7, July 2010
8. 吉仲 亮, Alexander Clark, “所属性質問と等価属性質問による合同性多重文脈自由文法の学習”, 夏の LA シンポジウム 2010, 2010 年 7 月
9. 斎藤 寿樹, 湊 真一, “ラベル付き区間グラフを列挙する BDD とその応用”, 夏の LA シンポジウム 2010, 2010 年 7 月
10. S. Yamashita, S. Minato, and D. M. Miller, “Synthesis of Semi-Classical Quantum Circuits,”, Proc. of 2nd Workshop on Reversible Computation, pp. 93-99, July 2010
11. Ryo Yoshinaka and Alexander Clark, “Polynomial Time Learning of Some Mul-

- multiple Context-Free Languages with a Minimally Adequate Teacher”, Formal Grammar, August 2010
12. 高橋渉, 湊真一, “ベイジアンネットワークを表現する ZDD からの高速計算プログラムの自動生成とその評価”, FIT-2010 IEICE/IPSJ 第 9 回 情報科学技術フォーラム, D-009, Vol. 2, pp. 411-414, 2010 年 9 月
 13. 岡崎佑太, 湊真一, “ZDD を用いた頻出パターン演算による Web テキストデータからの知識発見とその評価”, FIT-2010 IEICE/IPSJ 第 9 回 情報科学技術フォーラム, D-009, Vol. 2, pp. 111-113, 2010 年 9 月
 14. Shin-ichi Minato, “Recent Topics on Decision Diagrams and Discrete Structure Manipulation”, In Proc. of 9th International Workshop on Boolean Problems (IWSBP 2010), September 2010
 15. Shin-ichi Minato, “Discrete Structure Manipulation for Discovery Science Problems, In Proc. of 25th Annual International Symposium on Computer and Information Sciences (ISCIS 2010), pp. 359-364, September 2010
 16. Ryo Yoshinaka, “Polynomial-Time Identification of Multiple Context-Free Languages from Positive Data and Membership Queries”, 10th International Colloquium on Grammatical Inference, September 2010
 17. 湊真一, 鷲尾隆, 津田宏治, ほか, “FIT2010 イベント企画講演資料「Science と Engineering をつなぐ『Art』を求めて」”, FIT2010 第 9 回情報科学技術フォーラム, 2010 年 9 月
 18. 岡田克彦, 羽室行信, “ファイナンス研究における新しいアプローチ テキストマイニングを用いた投資家心理の数値化について ”, 関西学院大学 ビジネスアンド アカウンティングレビュー第 6 号, 2010 年 10 月
 19. Yusaku Kaneta, Shin-ichi Minato, and Hiroki Arimura, “Fast Bit-Parallel Matching for Network and Regular Expressions”, In Proc. of 17th Symposium on String Processing and Information Retrieval (SPIRE 2010), pp. 372-384, October 2010
 20. Yusaku Kaneta, Shingo Yoshizawa, Shin-ichi Minato, Hiroki Arimura, Yoshikazu Miyanaga, “Efficient Multiple Regular Expression Matching on FPGAs based on Extended SHIFT-AND Method”, In Proc. of Synthesis and Simulation Meeting and International Interchange (SASIMI-2010), pp.401-406 H22.10
 21. Masashi Kiyomi, Toshiki Saitoh, and Ryuhei Uehara, “Reconstruction of In-

- terval Graphs”, Theoretical Computer Science, Volume 411 Issue 43, October 2010
22. Ryo Yoshinaka, “Learnable Subclasses of Multiple Context-Free Grammars”, Workshop on Multiple Context-Free Grammars and Related Formalisms, October 2010
 23. 田部井靖生, 津田宏治, “大規模化合物のスケッチ表現によるクラスタリング法”, 第13回情報論的学習理論ワークショップ (IBIS2010), 2010年11月
 24. 佐藤泰介, 湊真一, “ベイジアンネットワークと離散構造処理系 (特集「ベイジアン・ネットワークの最先端」)”, 人工知能学会誌, Vol.25, No.6, pp.796-802, 2010年11月
 25. Masakazu Ishihata, Yoshitaka Kameya, Taisuke Sato, Shin-ichi Minato, “Parameter learning for Bayesian Networks on Shared Binary Decision Diagrams”, In Proc. of 1st International Workshop on Advanced Methodologies for Bayesian Networks (AMBN 2010), November 2010
 26. Shin-ichi Minato, “Discrete Structure Manipulation System and Applications for Uncertain Data Processing”, In Proc. of 1st International Workshop on Advanced Methodologies for Bayesian Networks (AMBN 2010), p. 19, November 2010
 27. Masakazu Ishihata, Yoshitaka Kameya, Taisuke Sato, Shin-ichi Minato, “An EM algorithm on BDDs with order encoding for logic-based probabilistic models”, Proc. of 2nd Asian Conference on Machine Learning (ACML2010), November 2010
 28. 斎藤寿樹, 大館陽太, 来嶋秀治, 宇野毅明, “グラフクラスと部分グラフ同型性”, 情報処理学会研究報告. AL, アルゴリズム研究会報告 2010-AL-132(5), 1-8, 2010-11-12, 2010年11月
 29. Yasuo Tabei, Takeaki Uno, Masashi Sugiyama, Koji Tsuda, “Single Versus Multiple Sorting in All Pairs Similarity Search”, The 2nd Asian Conference on Machine Learning (ACML2010), November 2010
 30. 湊真一, 有村博紀, “「おめでとうサイエティ論文賞」ゼロサプレス型二分決定グラフを用いたトランザクションデータベースの効率的解析手法”, 電子情報通信学会 情報・システムサイエティ誌, Vol. 15, No. 3, p. 15, 2010年11月
 31. 白井康之, 小山聡, 櫻井祐子, 川原純, 鶴間浩二, “楽天データに対する二分決定グラフを用いたデータ圧縮技法の適用”, 第3回楽天研究開発シンポジウム, 2010年

12月

32. Yasuo Tabei, Daisuke Okanohara, Shuichi Hirose, Koji Tsuda, “LGM: Mining Frequent Subgraphs from Linear Graphs”, The 15th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD2011) H22.12
33. Yasuo Tabei, Koji Tsuda, “Kernel-based Similarity Search in Massive Graph Databases with Wavelet Trees”, Eleventh SIAM International Conference on Data Mining (SDM2011), December 2010
34. Yusaku Kaneta, Shingo Yoshizawa, Shin-ichi Minato, Hiroki Arimura and Yoshikazu Miyanaga, “Dynamic Reconfigurable Bit-Parallel Architecture for Large-Scale Regular Expression Matching”, Proc. of the 2010 International Conference on Field-Programmable Technology (FPT’10), pp.21-28, December 2010
35. Koji Tsuda, Yasuo Tabei, “All pairs similarity search for large databases of chemical fingerprints”, Neural Information Processing Systems 23, December 2010
36. K. Tsuda and Y. Tabei, “All pairs similarity search for large databases of chemical fingerprints”, NIPS Workshop: Charting Chemical Space: Challenges and Opportunities for AI and Machine Learning, December 2010
37. Masashi Kiyomi, Toshiki Saitoh, and Ryuhei Uehara, “Bipartite Permutation Graphs are Reconstructible”, The 4th Annual International Conference on Combinatorial Optimization and Applications (COCOA 2010), December 2010
38. Takanori Inazumi, Shohei Shimizu and Takashi Washio, “Use of Prior Knowledge in a Non-Gaussian Method for Learning Linear Structural Equation Models”, Proc. of Ninth International Conference on Latent Variable Analysis and Signal Separation, Springer, LNCS 6365, pp. 221-228, 2010
39. M. Kayano, I. Takigawa, M. Shiga, K. Tsuda and M. Mamitsuka, “On the Performance of Methods for Finding a Switching Mechanism in Gene Expression”, Genome Informatics, 24:69-83, 2010
40. Akihiro Inokuchi and Takashi Washio, “Mining Frequent Graph Sequence Patterns Induced by Vertices”, Proc. of SIAM Data Mining Conference (SDM), CP11 Graph Mining, 2010
41. Akihiro Inokuchi and Takashi Washio, “GTRACE2: Improving Performance

- Using Labeled Union Graphs”, Proc. of PAKDD2010: The 14th Pacific-Asia Conference on Knowledge Discovery and Data Mining, Vol.II, LNAI6119, pp.178-188, 2010
42. H. Saigo and K. Tsuda, “Graph Mining in Chemoinformatics”, In H. Lodhi and Y. Yamanishi, editors, Chemoinformatics and Advanced Machine Learning Perspectives: Complex Computational Methods and Collaborative Techniques. Chapter 6, pages 95-128, IGI Global, 2010
 43. H. Kashima, H. Saigo, M. Hattori and K. Tsuda, “Graph Kernels for Chemoinformatics”, In H. Lodhi and Y. Yamanishi, editors, Chemoinformatics and Advanced Machine Learning Perspectives: Complex Computational Methods and Collaborative Techniques. Chapter 1, H22.99
 44. K. Tsuda and H. Saigo, “Graph Classification”, In C.C. Aggarwal and H. Wang, editors, Managing and Mining Graph Data. Chapter 11, pages 337-364, Springer, 2010
 45. Yasuhiro Sogawa, Shohei Shimizu, Aapo Hyvarinen, Takashi Washio, Teppei Shimamura and Seiya Imoto, “Discovery of Exogenous Variables in Data with More Variables than Observations”, Proc. of 20th International Conference on Artificial Neural Networks (ICANN2010), pp.67-76, 2010
 46. H. Kashima, S. Oyama, Y. Yamanishi and K. Tsuda, “Cartesian Kernel: An Efficient Alternative to the Pairwise Kernel”, IEICE Transaction on Information and Systems, E93-D:2672-2679, 2010
 47. Yasuhiro Sogawa, Shohei Shimizu, Yoshinobu Kawahara, and Takashi Washio, “An experimental comparison of linear non-Gaussian causal discovery methods and their variants”, Proc. of WCCI 2010 IEEE World Congress on Computational Intelligence, Joint Conference on Neural Networks (IJCNN), IEEE Catalog Number: CFP10US-DVD, ISBN: 978-1-4244-6917-8, pp.768-775, 2010
 48. Viet Phuong Nguyen, Takashi Washio, Tomoyuki Higuchi, “A new particle filter for high-dimensional state-space models based on intensive and extensive proposal distribution”, International Journal of Knowledge Engineering and Soft Data Paradigms, Vol. 2, No. 4, pp. 284 - 311, 2010
 49. 櫻井 祐子, 横尾 真, “予算制約を持つ入札者を対象とした再配分メカニズムの提案”, 人工知能学会論文誌 26(1), 217-227, 2011 年 1 月
 50. 川原 純、斎藤寿樹、鈴木 拓、湊 真一、吉仲 亮, “ZDD を用いたパスの列挙”, 冬の

LA シンポジウム, 2011 年 1 月

51. Shin-ichi Minato, Mikael Onsjo, Osamu Watanabe, “Faster Evaluation of ZBDD Compressed Multi-Linear Functions with GPU Parallelism (Research Report C-274) ”, Research Reports on Mathematical and Computing Sciences, Department of Mathematical and Computing Sciences, Tokyo Institute of Technology, SERIES C: Computer Science, ISSN 1342-2812, January 2011
52. Shin-ichi Minato, Mikael Onsjo, and Osamu Watanabe, “Faster Evaluation of ZBDD Compressed Multi-Linear Functions with GPU Parallelism”, Dept. of Math. and Comp. Sciences Research Reports, C-274, Tokyo Institute of Technology, January 2011
53. 湊 真一, “BDD/ZDD を基盤とする離散構造と演算処理系の最近の展開”, 電子情報通信学会 基礎・境界ソサイエティ Fundamentals Review Vol. 4, No. 3, 2011 年 1 月
54. 斎藤 寿樹, 川原 純, 吉仲 亮, 鈴木 拓, 湊 真一, “ZDD を用いたパスの列挙とその性能評価”, 情報処理学会 第 134 回アルゴリズム研究発表会, 2011 年 2 月
55. 川原 純, 斎藤 寿樹, 鶴間 浩二, 湊 真一, 吉仲 亮, “ZDD のリンクパズルへの応用”, 第 6 回 組合せゲーム・パズルミニ研究集会, 2011 年 2 月
56. Masashi Kiyomi, Toshiki Saitoh, and Ryuhei Uehara, “Voronoi Game on a Path”, The Institute of Electronics, Information and Communication Engineers, February 2011
57. Shin-ichi Minato, “PiDD: A New Decision Diagram for Manipulating Sets of Permutations”, Hokkaido University, Division of Computer Science, TCS Technical Reports, TCS-TR-A-11-50, February 2011
58. 大館 陽太, 斎藤 寿樹, 山中 克久, 来嶋 秀治, 岡本 吉央, 小野 廣隆, 宇野 裕之, 山崎 浩一, “k-比較可能グラフに対するパス距離幅の近似解法”, 情報処理学会 第 134 回アルゴリズム研究発表会, 2011 年 2 月
59. 河原吉伸, 津田宏治, 鷲尾隆, 武田朗子, 湊真一, “劣モジュラ性を用いた特徴集合列挙”, 情報論的学習理論と機械学習研究会, 信学技報, Vol. 110, No. 476, IBISML2010-113, pp. 63-68, 2011 年 3 月
60. 森岡涼子, 津田宏治, “産業連関表の情報幾何. 信学技報 IBISML2010-127”, 産業連関表の情報幾何. 信学技報 IBISML2010-127, 2011 年 3 月
61. Katsuhiko Okada, Yukinobu Hamuro, “Predicting Noise Trader Behavior Through Mining Newspaper Articles”, 5th International Workshop on Data-

- Mining and Statistical Science (DMSS2011) & 7th Workshop on Learning with Logics and Logics for Learning (LLLL), March 2011
62. Yasuo Tabei, “Kernel-based Similarity Search in Massive Graph Databases with Wavelet Trees”, 5th International Workshop on Data-Mining and Statistical Science (DMSS2011) & 7th Workshop on Learning with Logics and Logics for Learning (LLLL 2011), March 2011
 63. Ryo Yoshinaka, “Distributional Learning of Extensions of Context-Free Grammars ”, 5th International Workshop on Data-Mining and Statistical Science (DMSS2011) & 7th Workshop on Learning with Logics and Logics for Learning (LLLL 2011), March 2011
 64. Hiroyuki Morita, Yukinobu Hamuro, “A classification model using emerging patterns incorporating item taxonomy”, 2011 International Conference on Data Engineering and Internet Technology, March 2011
 65. K. Shimizu and K. Tsuda, “SlideSort: All Pairs Similarity Search for Short Reads”, *Bioinformatics*, 27(4):464-470, 2011
 66. E. Georgii, K. Tsuda and B.Scholkopf, “Multi-Way Set Enumeration in Weight Tensors”, *Machine Learning*, 82(2):123-155, 2011
 67. I. Takigawa, K. Tsuda and H. Mamitsuka, “Mining Significant Substructure Pairs for Interpreting Polypharmacology in Drug-Target Network”, *PLoS One*, 6(2):e16999, 2011
 68. Yoshinobu Kawahara, Shohei Shimizu and Takashi Washio, “Analyzing Relationships among ARMA Processes Based on Non-Gaussianity of External Influences”, *Neurocomputing*, NEUCOM-D-10-00033R1, 2011