

A list of Academic Achievements

■ Peer-reviewed Articles

Journal

- [1] J. Chun, T. Horiyama, T. Ito, [Natsuda Kaothanthong](#), H. Ono, Y. Otachi, T. Tokuyama, R. Uehara, and T. Uno. Base-object location problems for base-monotone regions. *Theoretical Computer Science*, 2013. (*accepted*)
- [2] J. Chun, [Natsuda Kaothanthong](#), R. Kasai, M. Korman, M. Nöllenburg, and T. Tokuyama. Algorithms for computing the maximum weight region decomposable into elementary shapes. *Computer Vision and Image Understanding*, 116(7):803-814, 2012.
- [3] [Natsuda Kaothanthong](#), J. Chun, and T. Tokuyama. Classified-distance based shape descriptor for image retrieval, CAIP special edition of Pattern Recognition. (*invited, submitted*)
- [4] C.-T. Nguyen, [Natsuda Kaothanthong](#), T. Tokuyama, and X.-H. Phan. A feature-word-topic model for image annotation and retrieval. *ACM Transactions on the Web*, 7(3):12:112:24, 2013.

International Conference Papers

- [5] L. Chiu, [Natsuda Kaothanthong](#), T. Theeramongkol, and C. Nattee. A corpus-based approach for Thai Romanization. *Proceedings of the 7th International Symposium on Natural Language Processing (SNLP2007)*, 2007.
- [6] C.-T. Nguyen, [Natsuda Kaothanthong](#), X. H. Phan, and T. Tokuyama. A feature-word-topic model for image annotation, *Proceedings of the 19th ACM Conf. on Information and Knowledge Management (CIKM2010)*, pp. 1481-1484, 2010.
- [7] J. Chun, [Natsuda Kaothanthong](#), Y. Ota, and T. Tokuyama. Image retrieval system using distance-based shape recognition, *Proceedings of the 14th Korea-Japan Joint Workshop on Algorithms and Computation (WAAC2011)*, 2011.
- [8] J. Chun, [Natsuda Kaothanthong](#), Y. Ota, and T. Tokuyama. Distance-based shape invariants for image retrieval, *Proceeding of the 4th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC2011)*, Hsinchu, Taiwan 2011.
- [9] J. Chun, [Natsuda Kaothanthong](#), H. Takahashi, and T. Tokuyama. How to cut a complicated figure by using scissors? Computing the maximum weight region consisting of base monotone regions, *Proceedings of the 5th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC2012)*, 2012.
- [10] J. Chun, [Natsuda Kaothanthong](#), H. Takahashi, and T. Tokuyama. Optimal grid decomposition for maximum weight region computation with application to image segmentation, *Computational Geometry: Young Researchers Forum (CG:YRF)*, 2012.
- [11] J. Chun, T. Horiyama, T. Ito, [Natsuda Kaothanthong](#), H. Ono, Y. Otachi, T. Tokuyama, R. Uehara and T. Uno. Algorithms for computing optimal image segmentation using quadtree decomposition. *Thailand-Japan Joint Conference on Computational Geometry and Graphs (TJCCGG2012)*, 2012.
- [12] J. Chun, [Natsuda Kaothanthong](#), and T. Tokuyama. Shape description using classified distances, *Proceeding of the 6th Annual Meeting of the Asian Association for Algorithms and Computation (AAAC2013)*, 2013.
- [13] J. Chun, [Natsuda Kaothanthong](#), and T. Tokuyama. Correspondence finder using classified distance distribution for efficient shape retrieval, *Proceedings of the 16th Korea-Japan Joint Workshop on Algorithms and Computation (WAAC2013)*, 2013.
- [14] J. Chun, T. Horiyama, T. Ito, [Natsuda Kaothanthong](#), H. Ono, Y. Otachi, T. Tokuyama, R. Uehara and T. Uno. Base location problems for base-monotone regions, *WALCOM: Algorithms and Computation, Lecture Notes in Computer Science*, volume 7748, pp. 53-64, 2013.
- [15] J. Chun, [Natsuda Kaothanthong](#), and T. Tokuyama. Classified-distance based shape descriptor for application to image retrieval. *Computer Analysis of Images and Patterns (CAIP2013)*, *Lecture Notes in Computer Science*, volume 8048, pp. 1-8. 2013.

■ Non-Refereed Conferences and Workshops

- [16] [Natsuda Kaothanthong](#). Study on a shape-based image retrieval using distance information, *The*

- 4th Thailand-Japan International Academic Conference (TJIA2011), 2011.
- [17] J.Chun, Natsuda Kaothanthong, H. Takahashi, and T.Tokuyama, An image segmentation using maximum weight region with shape constraint, The First ETH-JAPAN Workshop on Science and Computing, 2012.
 - [18] J. Chun, Natsuda Kaothanthong, and T. Tokuyama, Image recognition and retrieval by using distance information, LA Symposium 2011, pp. S[4]-1-4, 2011.
 - [19] J. Chun, Natsuda Kaothanthong, Y. Ota, and T. Tokuyama, Image retrieval using shape recognition, 第10回情報科学技術フォーラム(FIT2011), 2011.
 - [20] J. Chun, Natsuda Kaothanthong, and T. Tokuyama, Image segmentation using maximum weight region, 電子情報通信学会 (COMP 研究会), 2011.

■ **Doctoral Thesis**

Natsuda Kaothanthong, Image retrieval system using computational geometry. PhD dissertation, Tohoku University, 2014.