Naoyuki Kamiyama
Curriculum Vitæ

Position

Jul. 2019	–		Professor, Kyushu University
			Institute of Mathematics for Industry
Oct. 2011	–	Jun. 2019	Associate Professor, Kyushu University
			Institute of Mathematics for Industry
Apr. 2009	–	Sep. 2011	Assistant Professor, Chuo University
			Faculty of Science and Engineering
			Department of Information and System Engineering

CONCURRENT POSITION

Oct. 2014	–	Mar. 2021	PRESTO Researcher, JST, PRESTO
Apr. 2007	–	Mar. 2009	Research Fellow of the Japan Society for the Promotion Science

Education

Mar. 2009	Doctor of Engineering, Kyoto University
	Graduate School of Engineering
	Department of Architecture and Architectural Engineering
Mar. 2006	Master of Engineering, Kyoto University
	Graduate School of Engineering
	Department of Architecture and Architectural Engineering
Mar. 2004	Bachelor of Engineering, Kyoto University
	Faculty of Engineering
	Undergraduate School of Architecture

Peer-Reviewed Journal Papers

71. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Shun-ichi Maezawa, Yuta Nozaki, Yoshio Okamoto
Hardness of Finding Combinatorial Shortest Paths on Graph Associahedra
SIAM Journal on Discrete Mathematics, accepted.

70. Akifumi Kira, Kiyohito Nagano, Manabu Sugiyama, Naoyuki Kamiyama
Optimal Class Assignment Problem: A Case Study at Gunma University
Journal of the Operations Research Society of Japan, accepted.

69. Naoyuki Kamiyama
Non-uniformly Stable Matchings
ACM Transactions on Economics and Computation, accepted.

68. Naoyuki Kamiyama
Strongly Stable Matchings under Matroid Constraints
SIAM Journal on Discrete Mathematics, vol.39, no.3, pp.1471–1490 (2025).

67. Naoyuki Kamiyama
The Minimum-Cost Dynamic Flow Problem in a Fixed Graph with a Constant Target Flow Value
Networks, vol.85, no.4, pp.437–444 (2025).

66. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Algorithmic Theory of Qubit Routing in the Linear Nearest Neighborhood Architectures
ACM Transactions on Quantum Computing, vol.6, no.3, pp.19:1–19:17 (2025).

65. Naoyuki Kamiyama
Super-Stable Common Independent Sets of Generalized Matroids
Operations Research Letters, vol.60, pp.107248 (2025).

64. Naoyuki Kamiyama
Modifying an Instance of the Super-Stable Matching Problem
Information Processing Letters, vol.189, pp.106549 (2025).

63. Takehiro Ito, Yuni Iwamasa, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yuta Nozaki, Yoshio Okamoto, Kenta Ozeki
Reforming an Envy-Free Matching
Algorithmica, vol.87, pp.594–620 (2025).

62. Ayumi Igarashi, Naoyuki Kamiyama, Warut Suksompong, Yuen Sheung Man
Reachability of Fair Allocations via Sequential Exchanges
Algorithmica, vol.86, pp.3653–3683 (2024).

61. Kristóf Bérczi, Erika Bérczi-Kovács, Endre Boros, Fekadu Tolessa Gedefa, Naoyuki Kamiyama, Telikepalli Kavitha, Yusuke Kobayashi, Kazuhisa Makino
Envy-Free Relaxations for Goods, Chores, and Mixed Items
Theoretical Computer Science, vol.1002, pp.114596 (2024).

60. Naoyuki Kamiyama
A Note on Robust Subsets of Transversal Matroids
Journal of the Operations Research Society of Japan, vol.67, no.2, pp.37–45 (2024).

59. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yuta Nozaki, Yoshio Okamoto, Kenta Ozeki
On Reachable Assignments under Dichotomous Preferences
Theoretical Computer Science, vol.979, pp.114196 (2023).

58. Naoyuki Kamiyama
On Optimization Problems in Acyclic Hypergraphs
Information Processing Letters, vol.182, pp.106390 (2023).

57. Masataka Shirahashi and Naoyuki Kamiyama
Kernelization Algorithms for a Generalization of the Component Order Connectivity Problem
Journal of the Operations Research Society of Japan, vol.66, no.2, pp.112–129 (2023).

56. Naoyuki Kamiyama
Pareto Efficient Matchings with Pairwise Preferences
Theoretical Computer Science, vol.948, pp.113707 (2023).

55. Takehiro Ito, Yuni Iwamasa, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Shun-ichi Maezawa, Yuta Nozaki, Yoshio Okamoto, Kenta Ozeki
Monotone Edge Flips to an Orientation of Maximum Edge-Connectivity à la Nash-Williams,
ACM Transactions on Algorithms, vol.19, no.1, pp.6:1–6:22 (2023).

54. Naoyuki Kamiyama
A Matroid Generalization of the Super-Stable Matching Problem
SIAM Journal on Discrete Mathematics, vol.36, no.2, pp.1467–1482 (2022).

53. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Shortest Reconfiguration of Perfect Matchings via Alternating Cycles
SIAM Journal on Discrete Mathematics, vol.36, no.2, pp.1102–1123 (2022).

52. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
A Parameterized View to the Robust Recoverable Base Problem of Matroids under Structural Uncertainty
Operations Research Letters, vol.50, pp.370–375 (2022).

51. Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Submodular Reassignment Problem for Reallocating Agents to Tasks with Synergy Effects
Discrete Optimization, vol.44, pp.100631 (2022).

50. Naoyuki Kamiyama
The Envy-Free Matching Problem with Pairwise Preferences
Information Processing Letters, vol.172, pp.106158 (2021).

49. Naoyuki Kamiyama
Envy-Free Matchings with One-Sided Preferences and Matroid Constraints

Operations Research Letters, vol.49, no.5, pp.790–794 (2021).

48. Naoyuki Kamiyama, Pasin Manurangsi, Warut Suksompong
On the Complexity of Fair House Allocation
Operations Research Letters, vol.49, no.4, pp.572–577 (2021).

47. Takehiro Ito, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Algorithms for Gerrymandering Over Graphs
Theoretical Computer Science, vol.868, no.8, pp.30–45 (2021).

46. Naonori Kakimura, Naoyuki Kamiyama, Kenjiro Takazawa
The b-Branching Problem in Digraphs
Discrete Applied Mathematics, vol.283, pp.565–576 (2020).

45. Naoyuki Kamiyama
The Distance-Constrained Matroid Median Problem
Algorithmica, vol.82, no.7, pp.2087–2106 (2020).

44. Naoyuki Kamiyama
Popular Matchings with Two-Sided Preference Lists and Matroid Constraints
Theoretical Computer Science, vol.809, pp.265–276 (2020).

43. Naoyuki Kamiyama
Lexicographically Optimal Earliest Arrival Flows
Networks, vol.75, no.1, pp.18–33 (2020).

42. Naoyuki Kamiyama
Discrete Newton Methods for the Evacuation Problem
Theoretical Computer Science, vol.795, pp.510–519 (2019).

41. Akifumi Kira, Naoyuki Kamiyama, Hirokazu Anai, Hiroaki Iwashita, Kotaro Ohori
On Dynamic Patrolling Security Games
Journal of the Operations Research Society of Japan, vol.62, no.4, pp.152–168 (2019).

40. Chien-Chung Huang, Naonori Kakimura, Naoyuki Kamiyama
Exact and Approximation Algorithms for Weighted Matroid Intersection
Mathematical Programming, Series A, vol.177, no.1-2, pp.85–112 (2019).

39. Naoyuki Kamiyama
A Note on Balanced Flows in Equality Networks
Information Processing Letters, vol.145, pp.74–76 (2019).

38. Susumu Kawanaka and Naoyuki Kamiyama
An Improved Algorithm for Testing Substitutability of Weak Preferences
Mathematical Social Sciences, vol.99, pp.1–4 (2019).

37. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Reconfiguration of Maximum-Weight b-Matchings in a Graph
Journal of Combinatorial Optimization, vol.37, no.2, pp.454–464 (2019).

36. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Minimum-Cost b-Edge Dominating Sets on Trees
Algorithmica, vol.81, no.1, pp.343–366 (2019).

35. Naoyuki Kamiyama
Pareto Stable Matchings under One-Sided Matroid Constraints
SIAM Journal on Discrete Mathematics, vol.33, no.3, pp.1431–1451 (2019).

34. Yosuke Hanawa, Yuya Higashikawa, Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
The Mixed Evacuation Problem
Journal of Combinatorial Optimization, vol.36, no.10, pp.1299–1314 (2018).

33. Naoyuki Kamiyama
A Note on Submodular Function Minimization with Covering Type Linear Constraints
Algorithmica, vol.80, no.10, pp.2957–2971 (2018).

32. Naoyuki Kamiyama
A Characterization of Weighted Popular Matchings under Matroid Constraints

Journal of the Operations Research Society of Japan, vol.61, no.1, pp.2–17 (2018).

31. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Efficient Stabilization of Cooperative Matching Games
Theoretical Computer Science, vol.677, pp.9–82 (2017).

30. Naoyuki Kamiyama
Strategic Issues in College Admissions with Score-Limits
Operations Research Letters, vol.45, pp.105–108 (2017).

29. Naoyuki Kamiyama
A Note on the Submodular Vertex Cover Problem with Submodular Penalties
Theoretical Computer Science, vol.659, pp.95–97 (2017).

28. Naoyuki Kamiyama
Popular Matchings with Ties and Matroid Constraints
SIAM Journal on Discrete Mathematics, vol.31, no.3, pp.1801–1819 (2017).

27. Naoyuki Kamiyama
The Popular Matching and Condensation Problems under Matroid Constraints
Journal of Combinatorial Optimization, vol.32, no.4, pp.1305–1326 (2016).

26. Satoru Iwata, Naoyuki Kamiyama, Naoki Katoh, Shuji Kijima, Yoshio Okamoto
Extended Formulations for Sparsity Matroids
Mathematical Programming, Series A, vol.158, no.1, pp.565–574 (2016).

25. Keita Nakamura and Naoyuki Kamiyama
Many-to-Many Stable Matchings with Ties in Trees
Journal of the Operations Research Society of Japan, vol.59, no.3, pp.225–240 (2016).

24. Tamás Fleiner and Naoyuki Kamiyama
A Matroid Approach to Stable Matchings with Lower Quotas
Mathematics of Operations Research, vol.41, no.2, pp.734–744 (2016).

23. Naoyuki Kamiyama and Yasushi Kawase
On Packing Arborescences in Temporal Networks
Information Processing Letters, vol.115, pp.321–325 (2015).

22. Naoyuki Kamiyama
The Nucleolus of Arborescence Games in Directed Acyclic Graphs
Operations Research Letters, vol.43, pp.89–92 (2015).

21. Naoyuki Kamiyama and Naoki Katoh
The Universally Quickest Transshipment Problem in a Certain Class of Dynamic Networks with Uniform Path-Lengths
Discrete Applied Mathematics, vol.178, pp.89–100 (2014).

20. Yuya Higashikawa, Naoyuki Kamiyama, Naoki Katoh, Yuki Kobayashi
An Inductive Construction of Minimally Rigid Body-Hinge Simple Graphs
Theoretical Computer Science, vol.556, pp.2–12 (2014).

19. Naoyuki Kamiyama
A New Approach to the Pareto Stable Matching Problem
Mathematics of Operations Research, vol.39, no.3, pp.851–862 (2014).

18. Naoyuki Kamiyama
Arborescence Problems Theorems and Algorithms
Interdisciplinary Information Sciences, vol.20, no.1, pp.51–70 (2014).

17. Yusuke Matsumoto, Naoyuki Kamiyama, Keiko Imai
On Total Unimodularity of Edge-Edge Adjacency Matrices
Algorithmica, vol.67, no.2, pp.277–292 (2013).

16. Naoyuki Kamiyama
A Note on the Serial Dictatorship with Project Closures
Operations Research Letters, vol.41, pp.559–561 (2013).

15. Naoyuki Kamiyama

Matroid Intersection with Priority Constraints
Journal of the Operations Research Society of Japan, vol.56, no.1, pp.15–25 (2013).

14. András Frank, Satoru Fujishige, Naoyuki Kamiyama, Naoki Katoh
Independent Arborescences in Directed Graphs
Discrete Mathematics, vol.313, no.4, pp.453–459 (2013).

13. Naoyuki Kamiyama
A Note on the Quasi-Additive Bound for Boolean Functions
Journal of Math-for-Industry, vol.4-B, pp.119-122 (2012).

12. Naoyuki Kamiyama
Robustness of Minimum Cost Arborescences
Japan Journal of Industrial and Applied Mathematics, vol.29, no.3, pp.485–497 (2012).

11. Satoru Fujishige and Naoyuki Kamiyama
The Root Location Problem for Arc-Disjoint Arborescences
Discrete Applied Mathematics, vol.160, no.13–14, pp.1964–1970 (2012).

10. Yuichiro Yasui, Katsuki Fujisawa, Kazushige Goto, Naoyuki Kamiyama, Mizuyo Takamatsu
NETAL High-performance Implementation of Network Analysis Library Considering Computer Memory Hierarchy
Journal of the Operations Research Society of Japan, vol.54, no.4, pp.259–280 (2011).

9. Yusuke Matsumoto, Naoyuki Kamiyama, Keiko Imai
An Approximation Algorithm Dependent on Edge-Coloring Number for Minimum Maximal Matching Problem
Information Processing Letters, vol.111, no.10, pp.465–468 (2011).

8. Yutaka Iwaikawa, Naoyuki Kamiyama, Tomomi Matsui
Improved Approximation Algorithms for Firefighter Problem on Trees
IEICE Transaction on Information and Systems, vol.E94-D, no.2, pp.196–199 (2011).

7. Naoyuki Kamiyama and Naoki Katoh
Covering Directed Graphs by In-Trees
Journal of Combinatorial Optimization, vol.21, no.1, pp.2–18 (2011).

6. Kristóf Bérczi, Satoru Fujishige, Naoyuki Kamiyama
A Linear-Time Algorithm to Find a Pair of Arc-Disjoint Spanning In-Arborescence and Out-Arborescence in a Directed Acyclic Graph
Information Processing Letters, vol.109, no.23–24, pp.1227–1231 (2009).

5. Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
An Efficient Algorithm for the Evacuation Problem in a Certain Class of Networks with Uniform Path-Lengths
Discrete Applied Mathematics, vol.157, no.17, pp.3665–3677 (2009).

4. Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
Arc-Disjoint In-Trees in Directed Graphs
Combinatorica, vol.29, no.2, pp.197–214 (2009).

3. Naoyuki Kamiyama, Yuuki Kiyonari, Eiji Miyano, Shuichi Miyazaki, Katsuhisa Yamanaka
Computational Complexity of University Interview Timetabling
IEICE Transaction on Information and Systems, vol.E92-D, no.2, pp.130–140 (2009).

2. Takenao Taji, Shin-ichi Tanigawa, Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
Finding an Optimal Location of Line Facility using Evolutionary Algorithm and Integer Program
Journal of Computational Science and Technology, vol.2, no.3, pp.362–370 (2008).

1. Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
An Efficient Algorithm for Evacuation Problem in Dynamic Network Flows with Uniform Arc Capacity
IEICE Transaction on Information and Systems, vol.E89-D, no.8, pp.2372–2379 (2006).

Peer-Reviewed Conference Papers

(Especially, in SODA, AAMAS, AAAI, IJCAI, WSC, LNCS, LIPIcs, CRPIT, CCIS)

44. Ayumi Igarashi, Naoyuki Kamiyama, Yasushi Kawase, Warut Suksompong, Hanna Sumita, Yu Yokoi
Two-Sided Fairness in Many-to-One Matching
Proceedings of the 21st Conference on Web and Internet Economics (WINE), accepted.

43. Naoyuki Kamiyama, Hiroaki Yamada, Takashi Kato, Shizuo Kaji, Tetsuro Takahashi
A Topological Data Analysis Approach to Detecting Congestion in Pedestrian Crowds
Proceedings of the 2025 Winter Simulation Conference (WSC), accepted.

42. Yuen Sheung Man, Ayumi Igarashi, Naoyuki Kamiyama, Warut Suksompong
Reforming an Unfair Allocation by Exchanging Goods
Proceedings of the 36th International Symposium on Algorithms and Computation (ISAAC), LIPIcs 359, pp.54:1–54:21 (2025).

41. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Minimum Sum Coloring with Bundles in Trees and Bipartite Graphs
Proceedings of the 36th International Symposium on Algorithms and Computation (ISAAC), LIPIcs 359, pp.40:1–40:14 (2025).

40. Yasunari Hikima and Naoyuki Kamiyama
An Inverse Optimization Approach to Contextual Inverse Optimization
Proceedings of the 34th International Joint Conference on Artificial Intelligence (IJCAI), 5354–5362 (2025).

39. Ayumi Igarashi, Naoyuki Kamiyama, Warut Suksompong, Yuen Sheung Man
Reachability of Fair Allocations via Sequential Exchanges
Proceedings of the 38th AAAI Conference on Artificial Intelligence (AAAI), pp.9773–9780 (2024).

38. Takasugu Shigenobu and Naoyuki Kamiyama
On Connectedness of Solutions to Integer Linear Systems
Proceedings of the 16th Annual International Conference on Combinatorial Optimization and Applications (COCOA), LNCS 14461, pp.421–433 (2023).

37. Takehiro Ito, Yuni Iwamasa, Naoyuki Kamiyama, Yasuaki Kobayashi, Yusuke Kobayashi, Shun-ichi Maezawa, Akira Suzuki
Reconfiguration of Time-Respecting Arborescences
Proceedings of the 18th Algorithms and Data Structures Symposium (WADS), LNCS 14079, pp.521–532 (2023).

36. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Algorithmic Theory of Qubit Routing
Proceedings of the 18th Algorithms and Data Structures Symposium (WADS), LNCS 14079, pp.533–546 (2023).

35. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Shun-ichi Maezawa, Yuta Nozaki, Yoshio Okamoto
Hardness of Finding Combinatorial Shortest Paths on Graph Associahedra
Proceedings of the 50th EATCS International Colloquium on Automata, Languages and Programming (ICALP), LIPIcs 261, pp.82:1–82:17 (2023).

34. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yuta Nozaki, Yoshio Okamoto, Kenta Ozeki
On Reachable Assignments under Dichotomous Preferences
Proceedings of the 24th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA), LNCS 13753, pp.650–658 (2022).

33. Takehiro Ito, Yuni Iwamasa, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yuta Nozaki, Yoshio Okamoto, Kenta Ozeki
Reforming an Envy-Free Matching
Proceedings of the 36th AAAI Conference on Artificial Intelligence (AAAI), pp.5084–5091 (2022).

32. Hiroaki Yamada, Masataka Shirahashi, Naoyuki Kamiyama, Yumeka Nakajima
MAS Network: Surrogate Neural Network for Multi-Agent Simulation

Proceedings of the 22nd International Workshop on Multi-Agent-Based Simulation (MABS), LNCS 13128, pp.113–124 (2022).

31. Takehiro Ito, Yuni Iwamasa, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Shun-ichi Maezawa, Yuta Nozaki, Yoshio Okamoto, Kenta Ozeki
Monotone Edge Flips to an Orientation of Maximum Edge-Connectivity à la Nash-Williams
Proceedings of the 2022 Annual ACM/SIAM Symposium on Discrete Algorithms (SODA), pp.1342–1355 (2022).

30. Hiroaki Yamada and Naoyuki Kamiyama
Optimal Control of Pedestrian Flows by Congestion Forecasts Satisfying User Equilibrium Conditions
Proceedings of the 23rd International Conference on Principles and Practice of Multi-Agent Systems (PRIMA), LNCS 12568, pp.299–314 (2021).

29. Naoyuki Kamiyama
On Stable Matchings with Pairwise Preferences and Matroid Constraints
Proceedings of the 19th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), pp.584–592 (2020).

28. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Shortest Reconfiguration of Perfect Matchings via Alternating Cycles
Proceedings of the 27th Annual European Symposium on Algorithms (ESA), LIPIcs 144, pp.61:1–61:15 (2019).

27. Takehiro Ito, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Algorithms for Gerrymandering Over Graphs
Proceedings of the 18th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), pp.1413–1421 (2019).

26. Naoyuki Kamiyama
Many-to-Many Stable Matchings with Ties, Master Preference Lists, and Matroid Constraints
Proceedings of the 18th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), pp.583–591 (2019).

25. Takashi Ishizuka and Naoyuki Kamiyama
On the Complexity of Stable Fractional Hypergraph Matching
Proceedings of the 29th International Symposium on Algorithms and Computation (ISAAC), LIPIcs 123, pp.11:1–11:12 (2018).

24. Naonori Kakimura, Naoyuki Kamiyama, Kenjiro Takazawa
The b-Branching Problem in Digraphs
Proceedings of the 43rd International Symposium on Mathematical Foundations of Computer Science (MFCS), LIPIcs 117, pp.121–1215 (2018).

23. Naoyuki Kamiyama
Submodular Function Minimization with Submodular Set Covering Constraints and Precedence Constraints
Proceedings of the 15th Workshop on Approximation and Online Algorithms (WAOA), LNCS 10787, pp.90–101 (2018).

22. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto, Taichi Shiitada
Tight Approximability of the Server Allocation Problem for Real-Time Applications
Proceedings of the 3rd International Workshop on Algorithmic Aspects of Cloud Computing (Algocloud), LNCS 10739, pp.41–55 (2018).

21. Hiroaki Yamada, Kotaro Ohori, Tadashige Iwao, Akifumi Kira, Naoyuki Kamiyama, Hiroaki Yoshida, Hirokazu Anai
Modeling and Managing Airport Passenger Flow under Uncertainty: A Case of Fukuoka Airport in Japan
Proceedings of the 9th International Conference on Social Informatics (SocInfo), LNCS 10540, pp.419–430 (2017).

20. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto

Reconfiguration of Maximum-Weight b-Matchings in a Graph
Proceedings of the 23rd Annual International Computing and Combinatorics Conference (COCOON), LNCS 10392, pp.287–296 (2017).

19. Yosuke Hanawa, Yuya Higashikawa, Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
The Mixed Evacuation Problem
Proceedings of the 10th Annual International Conference on Combinatorial Optimization and Applications (COCOA), LNCS 10043, pp.18–32 (2016).

18. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Efficient Stabilization of Cooperative Matching Games
Proceedings of the 15th International Conference on Autonomous Agents and MultiAgent Systems (AAMAS), pp.41–49 (2016).

17. Chien-Chung Huang, Naonori Kakimura, Naoyuki Kamiyama
Exact and Approximation Algorithms for Weighted Matroid Intersection
Proceedings of the 27th Annual ACM/SIAM Symposium on Discrete Algorithms (SODA), pp.430–444 (2016).

16. Naoyuki Kamiyama
Stable Matchings with Ties, Master Preference Lists, and Matroid Constraints
Proceedings of the 8th International Symposium on Algorithmic Game Theory (SAGT), LNCS 9347, pp.3–14 (2015).

15. Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi, Yoshio Okamoto
Minimum-Cost b-Edge Dominating Sets on Trees
Proceedings of the 25th International Symposium on Algorithms and Computation (ISAAC), LNCS 8889, pp.195–207 (2014).

14. Naoyuki Kamiyama
The Popular Matching and Condensation Problems under Matroid Constraints
Proceedings of the 8th Annual International Conference on Combinatorial Optimization and Applications (COCOA), LNCS 8881, pp.713–728 (2014).

13. Yuya Higashikawa, Naoyuki Kamiyama, Naoki Katoh, Yuki Kobayashi
An Inductive Construction of Minimally Rigid Body-Hinge Simple Graphs
Proceedings of the 7th Annual International Conference on Combinatorial Optimization and Applications (COCOA), LNCS 8287, pp.165–177 (2013).

12. Tamás Fleiner and Naoyuki Kamiyama
A Matroid Approach to Stable Matchings with Lower Quotas
Proceedings of the 23rd Annual ACM/SIAM Symposium on Discrete Algorithms (SODA), pp.135–142 (2012).

11. Naoyuki Kamiyama
Robustness of Minimum Cost Arborescences
Proceedings of the 22nd International Symposium on Algorithms and Computation (ISAAC), LNCS 7074, pp.130–139 (2011).

10. Yusuke Matsumoto, Naoyuki Kamiyama, Keiko Imai
On Totally Unimodularity of Edge-Edge Adjacency Matrices
Proceedings of the 17th Annual International Computing and Combinatorics Conference (COCOON), LNCS 6842, pp.354–365 (2011).

9. Naoyuki Kamiyama
Submodular Function Minimization under a Submodular Set Covering Constraint
Proceedings of the 8th Annual Conference on Theory and Applications of Models of Computation (TAMC), LNCS 6648, pp.133–141 (2011).

8. Naoyuki Kamiyama and Tomomi Matsui
Approximation Algorithms for Data Association Problem Arising from Multitarget Tracking
Proceedings of the 17th Computing the Australasian Theory Symposium (CATS), CRPIT 119, pp.137–144 (2011).

7. Naoyuki Kamiyama
The Prize-Collecting Edge Dominating Set Problem in Trees

Proceedings of the 35th International Symposium on Mathematical Foundations of Computer Science (MFCS), LNCS 6281, pp.465–476 (2010).

6. Naoyuki Kamiyama and Naoki Katoh
A Polynomial-Time Algorithm for the Universally Quickest Transshipment Problem in a Certain Class of Dynamic Networks with Uniform Path-Lengths
Proceedings of the 20th International Symposium on Algorithms and Computation (ISAAC), LNCS 5878, pp.802–811 (2009).

5. Naoyuki Kamiyama and Naoki Katoh
The Minimum Weight In-Tree Cover Problem
Proceedings of the 2nd International Conference on Modelling, Computation and Optimization in Information Systems and Management Sciences (MCO), CCIS 14, pp.155–164 (2008).

4. Naoyuki Kamiyama and Naoki Katoh
Covering Directed Graphs by In-Trees
Proceedings of the 14th Annual International Computing and Combinatorics Conference (COCOON), LNCS 5092, pp.444–457 (2008).

3. Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
Arc-Disjoint In-Trees in Directed Graphs
Proceedings of the 19th Annual ACM/SIAM Symposium on Discrete Algorithms (SODA), pp.518–526 (2008).

2. Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
An Efficient Algorithm for the Evacuation Problem in a Certain Class of a Network with Uniform Path-Lengths
Proceedings of the 3rd International Conference on Algorithmic Aspect in Information and Management (AAIM), LNCS 4508, pp.178–190 (2007).

1. Naoyuki Kamiyama, Naoki Katoh, Atsushi Takizawa
An Efficient Algorithm for Evacuation Problems in Dynamic Network Flows with Uniform Arc Capacity
Proceedings of the 2nd International Conference on Algorithmic Aspect in Information and Management (AAIM), LNCS 4041, pp.231–242 (2006).

Scientific Service

Journal Editor

International Journal of Mathematics for Industry, subject editor (2023–)

Peer-Reviewed Conference Program Committee

40th AAAI Conference on Artificial Intelligence (AAAI), 2026
28th European Conference on Artificial Intelligence (ECAI), 2025
39th AAAI Conference on Artificial Intelligence (AAAI), 2025
33rd International Joint Conference on Artificial Intelligence (IJCAI), 2024
8th International Symposium on Combinatorial Optimization (ISCO), 2024
38th AAAI Conference on Artificial Intelligence (AAAI), 2024
32nd International Joint Conference on Artificial Intelligence (IJCAI), 2023
13th International Conference on Algorithms and Complexity (CIAC), 2023
37th AAAI Conference on Artificial Intelligence (AAAI), 2023
7th International Symposium on Combinatorial Optimization (ISCO), 2022
36th AAAI Conference on Artificial Intelligence (AAAI), 2022
35th AAAI Conference on Artificial Intelligence (AAAI), 2021
31st International Symposium on Algorithms and Computation (ISAAC), 2020
14th International Frontiers of Algorithmics Workshop (FAW), 2020
6th International Symposium on Combinatorial Optimization (ISCO), 2020
34th AAAI Conference on Artificial Intelligence (AAAI), 2020
5th International Symposium on Combinatorial Optimization (ISCO), 2017

28th International Symposium on Algorithms and Computation (ISAAC), 2017
4th International Symposium on Combinatorial Optimization (ISCO), 2016

Peer-Reviewed Conference Organizing Committee

32nd International Symposium on Algorithms and Computation (ISAAC), chair, 2021

Other Notable Conference Service

7th International Workshop on Matching Under Preferences (MATCHU-UP), PC, 2024
11th Hungarian-Japanese Symposium on Discrete Mathematics and Its Applications (HJ), PC, 2019
5th International Workshop on Matching Under Preferences (MATCHU-UP), PC, 2019
9th Hungarian-Japanese Symposium on Discrete Mathematics and Its Applications (HJ), PC chair, 2015
9th Hungarian-Japanese Symposium on Discrete Mathematics and Its Applications (HJ), OC, 2015

Journal Referee

ACM Transactions on Algorithms, Algorithmica, Artificial Intelligence, Autonomous Agents and Multi-Agent Systems Combinatorica, Discrete Applied Mathematics, Discrete Mathematics, Discrete Optimization, EURO Journal on Computational Optimization, European Journal of Combinatorics Games and Economic Behavior, Graphs and Combinatorics, IEICE Transactions, Information Processing Letters, International Journal of Mathematics for Industry, Japan Journal of Industrial and Applied Mathematics, Journal of Combinatorial Optimization, Journal of the Operations Research Society of Japan, Journal of Mathematical Economics, Mathematical Programming, Mathematics of Operations Research, Networks, Optimization Methods and Software, Optimization Letters, Pacific Journal of Optimization, RAIRO – Operations Research, RIMS Kokyuroku Bessatsu, SIAM Journal on Discrete Mathematics, SIAM Journal on Optimization, The International Journal of Foundation of Computer Science, and Theoretical Computer Science.

Conference Referee

AAAI Conference on Artificial Intelligence (AAAI), Annual International Conference on Combinatorial Optimization and Applications (COCOA), Annual International Computing and Combinatorics Conference (COCOON), Annual European Symposium on Algorithms (ESA), International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX), International Frontiers of Algorithmics Workshop (FAW), International Symposium on Fundamentals of Computation Theory (FCT), Annual Symposium on Foundations of Computer Science (FOCS), IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS), International Colloquium on Automata, Languages, and Programming (ICALP), International Conference on Integer Programming and Combinatorial Optimization (IPCO), International Conference on Autonomous Agents and MultiAgent Systems (AAMAS), International Conference on Algorithms and Complexity (CIAC), International Conference on Language and Automata Theory and Applications (LATA), International Joint Conference on Artificial Intelligence (IJCAI) International Symposium on Algorithms and Computation (ISAAC), International Symposium on Algorithmic Game Theory (SAGT), International Symposium on Combinatorial Optimization (ISCO) International Symposium on Scheduling (ISS), International Workshop on Computational Social Choice (COMSOC), Latin American Theoretical Informatics Symposium (LATIN), International Symposium on Mathematical Foundations of Computer Science (MFCS), International Conference on Principles of Distributed Systems (OPODIS), Annual ACM/SIAM Symposium on Discrete Algorithms (SODA), Symposium on Theoretical Aspects of Computer Science (STACS), Algorithms and Data Structures Symposium (WADS), Workshop on Algorithms and Computation (WALCOM), and International Workshop on Graph-Theoretic Concepts in Computer Science (WG).

Ph.D. Student

Takashi Ishizuka (Kyushu University, 2022)