Yongho Shin

Dept. of Computer Science, Yonsei University
50 Yonsei-ro, Seodaemun-gu
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Current Position

Graduate student, Yonsei University, South Korea — Mar 2018 - present
Advisor: Hyung-Chan An
Expected to graduate in Aug, 2024

Education

B.S. in Computer Science, Yonsei University, South Korea — Feb 2018
Awarded *high honors at graduation*

Research Interests

Combinatorial optimization
Approximation algorithms
Online algorithms and competitive analysis
Learning-augmented algorithms
Theoretical computer science

Research Papers

Y. Shin, C. Lee, and H.-C. An. On optimal consistency-robustness trade-off for learning-augmented multi-option ski rental. *arXiv preprint arXiv:2312.02547*, 2023.

Y. Shin, C. Lee, G. Lee, and H.-C. An. Improved learning-augmented algorithms for the multi-option ski rental problem via best-possible competitive analysis. In *ICML 2023: Proceedings of the 40th International Conference on Machine Learning*, PMLR 202, pages 31539-31561, 2023.

K. Kim, Y. Shin, and H.-C. An. Constant-factor approximation algorithms for parity-constrained facility location and k-center. *Algorithmica 85*, pages 1883–1911, 2023.

- K. Kim, Y. Shin, and H.-C. An. Constant-factor approximation algorithms for the parity-constrained facility location problem. In *ISAAC 2020: Proceedings of the 31st International Symposium on Algorithms and Computation*, pages 21:1-21:17, 2020.

Y. Shin and H.-C. An. Making three out of two: three-way online correlated selection. In *ISAAC 2021: Proceedings of the 32nd International Symposium on Algorithms and Computation*, pages 49:1-49:17, 2021.

Y. Shin, K. Kim, S. Lee, and H.-C. An. Online graph matching problem with a worst-case reassignment budget. *arXiv preprint arXiv:2003.05175*, 2020.

Awards

High honors at graduation, Yonsei University — Feb 2018

Teaching

Teaching assistant, Yonsei University

CSI3108 (Algorithm analysis)	Fall 2018-2021, 2023
AIC2130 (Computer algorithms for AI applications)	Fall 2023
GEK6205 (Design and analysis of optimization algorithms)	Fall 2023
CCO2103 (Data structures)	Spring 2023
CSI2103 (Data structures)	Spring 2018-2021

Experience

Visiting research intern, Cornell University Host: David B. Shmoys	Sep 2022 - Dec 2022
Research intern, Yonsei University Advisor: Hyung-Chan An	Jan 2017 - Feb 2018
Programmer, Republic of Korea Air Force	Nov 2013 - Aug 2015