Yongho Shin

Dept. of Computer Science, Yonsei University 50 Yonsei-ro, Seodaemun-gu Seoul 03722, South Korea Email: yshin@yonsei.ac.kr

CurrentGraduate student, Yonsei University, South KoreaPositionAdvisor: Hyung-Chan An

Mar 2018 - present

Education

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

Feb 2018

Research Interests Combinatorial optimization Approximation algorithms

Online algorithms and competitive analysis

Theoretical computer science

Research Papers 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. To appear in *ICML 2023: The 40th International Conference on Machine Learning*, 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 CCO 2103 (Data structures) CSI 3108 (Algorithm analysis) CSI 2103 (Data structures)

Spring 2023 Fall 2018-2021 Spring 2018-2021

Experience

Visiting research intern, Cornell University

Sep 2022 - Dec 2022

Host: David B. Shmoys

Research intern, Yonsei University Advisor: Hyung-Chan An Jan 2017 - Feb 2018

Programmer, Republic of Korea Air Force

Nov 2013 - Aug 2015