Tao Zixu He

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Research Interest

Algorithm, Computational Complexity Theory, and Computational Social Choice.

Education

2021 – 2025	**Bachelor (Honours), University of New South Wales** in Computer Science.

Work Experience

2024 – 2025	**Research Assistant.** University of New South Wales.
2023	**Software Engineer.** h2x engineering.

Selected Awards

2025	**Engineering 2024 Dean's Honours List(Highly Commended)**, University of New South Wales.
2024	**Engineering 2023 Dean's Honours List**, University of New South Wales.
2023	**6th Place worldwide and 1st in Australia**, IEEEXtreme.
	First Place (Gold Medal), 2024 ICPC South Pacific region contest.
	First Place (Gold Medal), 2023 ICPC South Pacific region contest.
2022	**5th Place worldwide and 1st in Australia**, IEEEXtreme.

Publications

1. H. Aziz, Z. He, X. Lu, and K. Zhou, "Fair allocation of divisible goods under non-linear valuations," in *Proc. of the 24th International Conference on Autonomous Agents and Multiagent Systems*, 2025, pp. 170–178.

2. K. Clinch, S. Gaspers, Z. He, A. Saffidine, and T. Zhang, "A piecewise approach for the analysis of exact algorithms," in *International Conference and Workshops on Algorithms and Computation*, Springer, 2025, pp. 79–93.

3. Z. He, S. Botan, J. Lang, A. Saffidine, F. Sikora, and S. Workman, "Fair railway network design," *arXiv preprint arXiv:2409.02152*, 2024.

Skills

Languages	Chinese (native), English (fluent).
Programming	C, C++, Python, JavaScript, Java, Answer Set Programming, AMPL (A Mathematical Programming Language)