

Hossein Nekouyan Jazi

[hossein-nekouyan.github.io](https://github.com/hossein-nekouyan)

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Summary

Recent M.Sc. graduate in Computer Science from the **University of Alberta**; supervised by Dr. Xiaoqi Tan. Currently a **full-time Research Assistant** in the Department of Computing Science at UAlberta, working with Dr. Tan and Dr. Bo Sun. Publications include work appearing at **WWW**, **WINE**, **NeurIPS**, and **ACM SIGMETRICS**. Actively seeking **Ph.D.** positions.

Research Interests

- Decision making under uncertainty
- Computational Economics
- Algorithmic game theory and mechanism design
- Combinatorial optimization and polyhedral methods

Education

- Jan 2023– **M.Sc., Computer Science**, *University of Alberta*, Edmonton, Canada, GPA: 3.9/4.0
Mar 2025 *Thesis: Randomized Posted Pricing and Rounding Schemes for Online Selection and Matching* (Nominated for best thesis award (TBA))
Supervisor: Dr. Xiaoqi Tan
Coursework: Theoretical Foundations of Reinforcement Learning; Approximation Algorithms; Randomized Algorithms; Optimization and Decision-Making under Uncertainty
- Sep 2018– **B.Sc., Computer Science**, *University of Tehran*, Tehran, Iran, GPA: 18.41/20.0
Jul 2022 *Coursework*: Graph Theory and Applications; Number Theory; Algebra I; Linear Algebra; Strategic Games I; Fundamentals of Logic; Design and Analysis of Algorithms; Statistical Methods; Theory of Computation; Introduction to Bioinformatics; Differential Equations

Publications

Preprints

- 2025 **Posted Pricing for Online Selection: Limited Price Changes and Risk Sensitivity.**
Under Review.
Hossein Nekouyan Jazi, Bo Sun, Xiaoqi Tan.
- 2025 **Online Rounding Schemes for k -Rental Problems.**
Under Review.
Hossein Nekouyan Jazi, Bo Sun, Raouf Boutaba, Xiaoqi Tan.

Per-reviewed Conference Publications

- 2025 **Online Multi-Class Selection with Group Fairness Guarantee.**
NeurIPS 2025.
Faraz Zargari, **Hossein Nekouyan Jazi**, Bo Sun, Xiaoqi Tan.
- 2025 **Online Allocation with Multi-Class Arrivals: Group Fairness vs. Individual Welfare.**
ACM SIGMETRICS 2025.
Faraz Zargari, **Hossein Nekouyan Jazi**, Bo Sun, Xiaoqi Tan.

- 2025 **Posted Price Mechanisms for Online Allocation with Diseconomies of Scale.**
The Web Conference (WWW 2025).
Hossein Nekouyan Jazi, Bo Sun, Raouf Boutaba, Xiaoqi Tan.
- 2024 **Static Pricing for Online Selection Problem and Its Variants.**
International Conference on Web and Internet Economics (WINE 2024).
Bo Sun, **Hossein Nekouyan Jazi**, Xiaoqi Tan, Raouf Boutaba.
- 2024 **Online Conversion with Group Fairness Constraints.**
ACM SIGMETRICS Performance Evaluation Review.
Hossein Nekouyan Jazi, Faraz Zargari, Bo Sun, Xiaoqi Tan.

Working Projects

The Max k -Colorable Subgraph Problem on Unit Disk and Comparability Graphs

References

Dr. Xiaoqi Tan — Assistant Professor, Department of Computing Science, University of Alberta

<https://xiaoqitan.org/>

Dr. Zachary Friggstad — Associate Professor, Department of Computing Science, University of Alberta

<https://friggstad.github.io/>

Dr. Bo Sun — Assistant Professor, School of Electrical Engineering and Computer Science, University of Ottawa

<https://sunbo-online.github.io/>

Research Experience

Apr 2025– **Full-time Research Assistant**, *Alberta Machine Intelligence Institute (Amii), University of Alberta*, Edmonton, Canada
Present
Supervisor: Dr. Xiaoqi Tan

Jan 2023– **Graduate Research Fellowship**, *University of Alberta*, Edmonton, Canada
Jan 2025
Supervisor: Dr. Xiaoqi Tan

Teaching Experience

Jan 2023– **Graduate Teaching Assistant**, *University of Alberta*, Edmonton, Canada

Apr 2025 Algorithm I (four terms) and Algorithm II (one term): teaching, tutorials, marking, student support.

Dec 2019– **Teaching Assistant**, *University of Tehran*, Tehran, Iran

Apr 2022 Courses: Advanced Programming; Data Structures and Algorithms; Design and Analysis of Algorithms; Graph Theory; Introduction to Bioinformatics.

Skills

Programming Python, Gurobi, C++, Java, \LaTeX

Tools Git, Linux, Overleaf, Jupyter, VS Code

Languages English (fluent), Persian (native)