

# Hossein Nekouyan Jazi

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Canada

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## Summary

## Education

- Jan 2023– **MSc, 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*  
*Coursework:* Theoretical Foundation of Reinforcement Learning; Approximation Algorithms; Randomized Algorithms; Optimization and Decision-Making under Uncertainty
- Sep 2018– **BSc, Computer Science**, University of Tehran, Tehran, Iran, GPA: 3.71/4.0  
Jul 2022 *Key coursework:* Graph Theory and Applications; Number Theory; Algebra 1; Linear Algebra; Strategic Games 1; Fundamentals of Logic; Design and Analysis of Algorithms; Statistical Methods; Theory of Computation; Introduction to Bioinformatics; Differential Equations

## Publications

- Online Rounding Schemes for  $k$ -Rental Problems.** *Under Review (WINE 2025).*
- Online Allocation with Multi-Class Arrivals: Group Fairness vs. Individual Welfare.** *Proceedings of the ACM on Measurement and Analysis of Computing Systems (ACM SIGMETRICS 2025).*
- Posted Price Mechanisms for Online Allocation with Diseconomies of Scale.** *The Web Conference (WWW 2025).*
- Online Conversion with Group Fairness Constraints.** *ACM SIGMETRICS Performance Evaluation Review (ACM SIGMETRICS 2024).*
- Static Pricing for Online Selection Problem and Its Variants.** *International Conference on Web and Internet Economics (WINE 2024).*

## Working Projects

- Risk-Sensitive Correlated Pricing Mechanisms for Online Selection Problems and Their Variants
- The Max  $k$ -Colorable Subgraph Problem on Unit Disk and Comparability Graphs

## 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 Research in online algorithms, competitive analysis, and pricing mechanisms.

## Teaching Experience

- Jan 2023– **Graduate Teaching Assistant**, *University of Alberta*, Edmonton, Canada  
Apr 2025 Algorithm I (four terms) and Algorithm II (one term): 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.

## 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/>

## Skills

- Programming Python, C++, Java, L<sup>A</sup>T<sub>E</sub>X  
Tools Git, Linux, Overleaf, Jupyter, VSCode  
Languages English (fluent), Persian (native)