

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, \LaTeX
Tools Git, Linux, Overleaf, Jupyter, VSCode
Languages English (fluent), Persian (native)