

Research Interests

- Mechanism Design
- Algorithmic Game Theory
- Approximation & Online Algorithms
- Combinatorial Optimization
- Algorithmic Fairness
- Graph Theory

Education

- 2021-present **Ph.D. in Computer Science**, *University of Texas at Austin*.
Advised by Prof. Shuchi Chawla
- 2019-2021 **M.S.C. in Computer Science**, *University of Wisconsin Madison*.
Advised by Prof. Shuchi Chawla
- 2014-2019 **B.C. in Computer Engineering**, *Sharif University of Technology*.
- Summer 2013 **Official Preparation School for National Mathematics Olympiad**, *Young Scholars Club*.

Publications

- **A Multi-Dimensional Online Contention Resolution Scheme for Revenue Maximization**
SODA 2025, with Shuchi Chawla, Dimitrios Christou, Trung Dang, Zhiyi Huang and Gregory Kehne
- **Buy-many Mechanisms for Many Unit-demand Buyers** [Best paper award]
WINE 2023, with Shuchi Chawla, Yifeng Teng and Christos Tzamos
- **Prophet Secretary Against the Online Optimal** [Under revision at MOR (minor revision)]
EC 2023, with Paul Duetting, Evangelia Gergatsouli, Yifeng Teng and Alexandros Tsigonias-Dimitriadis
- **Pricing Ordered Items**
STOC 2022, with Shuchi Chawla, Yifeng Teng and Christos Tzamos
- **Individually-Fair Auctions for Multi-Slot Sponsored Search** [Best student paper award]
FORC 2022, with Shuchi Chawla and Nathaniel Sauerberg
- **Almost Envy-free Allocations for Restricted Additive Valuations**
IJCAI 2022, with Hannaneh Akrami and Masoud Seddighin
- **Parameterized Verification under TSO is PSPACE-Complete**
POPL 2020, with Parosh Aziz-Abdulla and Mohamed Faouzi Atig
- **Reliability Maximization in Uncertain Graphs**
ICDE 2021, with Xiangyu Ke, Arijit Khan and Mohammad Al Hasan
- **Reliability Maximization in Uncertain Graphs**
IEEE Transactions on Knowledge and Data Engineering, with Xiangyu Ke, Arijit Khan and Mohammad Al Hasan

Internships

- Fall 2022 **Google Research, Market Algorithms**, Student Researcher
Mountain View, USA.
- April 2022 **DIMACS Institute**, Visiting Scholar
- Summer 2018 **IIT Delhi, India**, Research Intern.
Supervised by Prof. Naveen Garg
- 2017-2018 **Uppsala University, Sweden**, Research Intern.
Supervised by Prof. Parish Aziz-Abdulla
- Summer 2016 **NTU, Singapore**, Research Intern.
Supervised by Prof. Arijit Khan

Honors and Awards

- **Best paper award**, WINE 2023
- **Best student paper award**, FORC 2022
- **Silver Medal** in National Mathematics Olympiad, September 2013
- Recipient of **Grant for undergraduate studies** from the Iranian National Elites Foundation, for outstanding academic success, 2014-2015

Teaching Assistant

University of Texas at Austin:

Algorithmic Perspective on Microeconomics (Fall 2024), Algorithms and Complexity (Spring 2024), Principles of Machine Learning (Fall 2023), Approximation Algorithms and Complexity (Fall 2021)

University of Wisconsin Madison

Programming 2 (Fall 2020), Introduction to Design of Algorithms (Spring 2020), Discrete Mathematics (Fall 2019)

Working Experience and Services

Program Committee

WINE24, AAAI-25 Workshop on Privacy-Preserving Artificial Intelligence

Reviewer

MOR24, SODA24, STOC23, ESA23, ITCS22, AAAI22, WINE22, TEAC20, WINE20

Collaboration with Mathematics Olympiad Committee

Grader for team selection tests for international mathematics Olympiad

Iranian Geometry Olympiad

Participated in organization of 3rd Iranian Geometry Olympiad

Related Course

- Approximation Algorithms
- Advanced Algorithms
- Randomized Algorithms
- Online Algorithms
- Algorithmic Game Theory
- Reinforcement Learning
- Advanced Learning Theory
- Nonlinear Optimization

Computer Skills

Programming Languages: C/C++, Java, Python, HTML, Linux, Matlab