

## 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.Sc. 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 Tsionias-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:

Algorithms and Complexity, Principles of Machine Learning (Fall 2023), Approximation Algorithms and Complexity (Fall 2021)

### University of Wisconsin Madison

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

## Computer Skills

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