

# Arash Ashuri

## Curriculum Vitae

Saarbrücken, Germany  
\* October, 22, 1998-Mashhad, Iran  
☎ (+98) 930 226 1297  
✉ arashashoori199821@gmail.com  
🌐 Personal webpage



### Research Interests

- Algorithms
- Algorithmic Game Theory
- Online Learning
- Online Algorithms

### Education

2022–2025 **M.Sc. in Computer Science**, Sharif University of Technology, Tehran-Iran  
GPA – **18.46/20.00** (rank 1)

2017–2022 **B.Sc. in Mathematics with minor in Computer Science**, Sharif University of Technology, Tehran-Iran  
GPA – **17.88/20.00** - via 154 Credits  
Last 2 years GPA – **19.10/20.00**

### Publications

- “EF2X Exists For Four Agents”, Arash Ashuri, Vasilis Gkatzelis, Alkmini Sgouritsa, **AAAI 2025** (Oral Award), [arXiv](#), [AAAI version](#)
- “Simultaneously satisfying MXS and EFL”, Arash Ashuri, Vasilis Gkatzelis, **EC 2025**, [arXiv](#), [EC version](#)
- “EFX Allocations Exist on Triangle-Free Multi-Graphs”, Mahyar Afshinmehr, Arash Ashuri, Pouria Mahmoudkhan, Kurt Mehlhorn, **AAMAS 2026** (Oral Award), [arXiv](#)
- “EFX Allocations Exist on Multi-Graphs”, Mahyar Afshinmehr, Arash Ashuri, Pouria Mahmoudkhan, Kurt Mehlhorn, Amirmohammad Shahrezaei, [arXiv](#), **EC 2026**

### Working Papers

- “On the Existence and Computation of Local EFX Allocations”, Mahyar Afshinmehr, Arash Ashuri, Nidhi Rathi
- “Polynomial-Time EFX Repair for Cancelable Valuations”, Hannaneh Akrami, Arash Ashuri, Bhaskar Ray Chaudhury, Kurt Mehlhorn, Maksim Soldatov

### Research Positions

2026 **Algorithmic Game Theory**, Internship at Max Planck Institute for Informatics under the supervision of [Prof. Kurt Mehlhorn](#) and [Hannaneh Akrami](#)  
April-2026  
September

### Other Research Experience

2025 **Fair Division**, remotely under the supervision of [Prof. Kurt Mehlhorn](#)  
Feb-2026 Feb Researched on EFX allocation related questions, mostly EFX allocations on multi-graphs, leading to two papers.  
Winter 2023- **Fair Division**, remotely under the supervision of [Prof. Vasilis Gkatzelis](#)  
Summer 2024 Researched relaxations of envy freeness and proportionality for indivisible goods, leading to two papers. Furthermore, I researched the existence of EFX allocations for four agents.

- Summer **Mechanism Design**, remotely under the supervision of [Prof. Haifeng Xu](#)
- 2022- Fall 2022 Researched on finding an approximate revenue maximizer mechanism in a data auction with negative linear externalities. Studied approximate revenue maximizer mechanisms in multi-item auctions and their guarantee bounds and tried to alter them to get results for our problem.

## Honors and Awards

- 2022 **Ranked 3<sup>rd</sup> in the National University Entrance Examination for a Master's Degree in Computer Science.**
- 2016 **Silver Medal in National Physics Olympiad, Iran**

## Conference Participations

**EC 2026**, 27th ACM Conference on Economics and Computation

## Voluntary Teaching Experience

- Spring 2024 **Algorithmic Game Theory**, *Head Teaching Assistant*, [Prof. Masoud-Seddighin](#)
- Spring 2024 **Algorithm Design**, *Teaching Assistant*, [Prof. Shahram Khazaei](#)
- Fall 2023 **Data Structures**, *Head Teaching Assistant*, [Prof. Shahram Khazaei](#)
- Fall 2022 **Introduction to Cryptography**, *Head Teaching Assistant*, [Prof. Shahram Khazaei](#)
- Fall 2022 **Game Theory**, *Teaching Assistant*, [Prof. Mojtaba Tefagh](#)
- Spring 2022 **Game Theory**, *Teaching Assistant*, [Prof. Kasra Alishahi](#)
- Fall 2021 **Statistics**, *Head Teaching Assistant*, [Prof. Javad Ebrahimi](#)
- Spring 2021 **Introduction to Probability**, *Head Teaching Assistant*, [Prof. Shahram Khazaei](#)
- Spring 2021 **Introduction to Cryptography**, *Teaching Assistant*, [Prof. Shahram Khazaei](#)
- Spring 2019 **Introduction to Probability**, *Teaching Assistant*, [Prof. Shahram Khazaei](#)
- 2017-2024 **Physics Olympiad Teacher**, *at various branches of high schools, Iran.*

## Selected Courses

|                                    |           |                                     |           |
|------------------------------------|-----------|-------------------------------------|-----------|
| ○ + Algorithmic Game Theory        | 20.0/20.0 | ○ Math Analysis 2                   | 19.2/20.0 |
| ○ Algorithm Design                 | 18.8/20.0 | ○ Fourier Analysis and applications | 19.3/20.0 |
| ○ Game Theory                      | 19.2/20.0 | ○ Functional Analysis               | 16.8/20.0 |
| ○ + Randomized Algorithms          | 18.5/20.0 | ○ Topology                          | 20.0/20.0 |
| ○ + Deep Learning                  | 19.7/20.0 | ○ + Computer Science Theory         | 16.0/20.0 |
| ○ Linear Optimization              | 17.0/20.0 | ○ + Quantum Computation             | 19.0/20.0 |
| ○ + Advanced Optimization          | 20.0/20.0 | ○ + Matrix Computation              | 20.0/20.0 |
| ○ + Scientific Computation Seminar | 18.0/20.0 | ○ + Introduction to Cryptography    | 18.1/20.0 |
| ○ Probability And Random Process   | 20.0/20.0 | ○ + Cryptography Seminar            | 20.0/20.0 |
| ○ Theory of Languages and Automata | 18.0/20.0 | ○ + Information Theory Seminar      | 18.5/20.0 |
| ○ + Logic In Computer Science      | 20.0/20.0 | ○ + Coding Theory                   | 19.6/20.0 |
| ○ Math Analysis 1                  | 20.0/20.0 |                                     |           |

Graduate courses are marked with +.

## Languages

- English (TOEFL: R:28, L:21, S:23, W:24)
- German (A1 equivalent)
- Persian (Native)

## Programming Languages

- $\text{\LaTeX}$  (highly proficient)
- Python (highly proficient)
- Java (proficient)
- Matlab (experienced)
- Clojure (experienced)