

Yanru Guan

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Education

Carnegie Mellon University — School of Computer Science

Exchange Student

Jan 2026 – May 2026 (exp.)

Pittsburgh, PA

Peking University — School of Electronic Engineering & Computer Science (EECS)

B.Sc. Computer Science & Technology · Turing Class · GPA: 3.913/4.000

Aug 2023 – Jun 2027 (exp.)

Beijing, China

No. 2 High School of East China Normal University

High School · Distinguished Graduation (top 10/400)

Aug 2020 – Jun 2023

Shanghai, China

Research Experience

DaGAME Lab, Peking University — Research Intern

Advisor: Prof. Xiaotie Deng

Oct 2023 – Present

- Computational economics and algorithmic game theory, with a focus on mechanism design, information elicitation, pricing in digital markets, and strategic behavior in automated bidding.

Microsoft Research Asia (MSRA) — Research Intern

Mentor: Dr. Yuhui Yuan

Dec 2024 – Mar 2025

Course Project: Numerical Methods — Principles, Algorithms & Applications

Advisor: Prof. Tiao Lu

May 2024

- Built a neural-network-based financial trading model; conducted live trading and presented one-year performance at the following year's seminar.

Conference Reviewer

- IEEE Symposium on Foundations of Computer Science (FOCS) 2024
- AI for Mechanism Design and Strategic Decision Making (AIMS), ICLR 2026 Workshop

Publications & Manuscripts

Authors in alphabetical order unless marked †

[1] Xiaotie Deng, Yanru Guan, Ningyuan Li, Zihe Wang, Wu Xin, Jie Zhang. *Selling Data as a Digital Good with Scaling Valuations*. **ICLR 2026 Workshop AIMS**, 2026. [openreview]

[2] Xiaotie Deng, Yanru Guan, Ningyuan Li, Zihe Wang, Jie Zhang. *Ex-Ante Truthful Distribution-Reporting Mechanisms*. **WINE 2025** (Conference on Web and Internet Economics), Rutgers U., 2025. [arXiv:2507.04030]

[3] Yanru Guan†, Jiahao Zhang, Zhe Feng, Tao Lin. *On the Coordination of Value-Maximizing Bidders*. *Under Review*, 2026. [arXiv:2511.04993]

Invited Talks & Presentations

Northwestern University CS Theory Seminar – *Ex-Ante Truthful Distribution-Reporting Mechanisms*

Mar 2026

CMU Economics and Computer Science Seminar – *Ex-Ante Truthful Distribution-Reporting Mechanisms*

Feb 2026

WINE 2025, Rutgers University – *Improved Budget-Feasible Mechanisms for Submodular Valuations*

Dec 2025

China IOI 2026 Training Camp – *Personal growth journey & reflections*

Dec 2025

Asia-Pacific Informatics Olympiad (APIO) 2024 – *Probability Theory and Probabilistic Methods*

May 2024

Teaching & Professional Services

Teaching Assistant, CMU 15-451: Algorithm Design and Analysis(Prof. Yang Liu & Richard Peng)	Jan – May 2026
Trainer & Guest Commentator, ICPC North America Programming Camp (NAPC) + ICPC Live	Mar 2026
Teaching Assistant, PKU 04831760: C/C++ Programming Practice (Honor Track)(Prof. Shaofeng Jiang)	Feb – Jun 2025
External Coach, Shandong Provincial Informatics Olympiad Training Camp	2023 – 2024
Author, “Women are equally outstanding as men”, CCF NOI 40th Anniversary Commemorative Collection (pp. 226–228)	Mar – Jun 2024
Contributor, <i>Informatics Olympiad Dictionary</i> (official guidebook, China Computer Federation)	2022 – 2023

Honors & Awards

Research Awards

- HuanYu Information Quest Award, EECS, Peking University Dec 2025
- Rising Star in Computer Science Research, School of CS, Peking University Nov 2025
- Outstanding Student, Center on Frontiers of Computing Studies (CFCS) Dec 2024

Scholarships

- **May Fourth Scholarship** (highest-level university scholarship, Peking University) Sep 2025
- **National Scholarship** (highest honor for undergraduates in China, top 0.5%) Sep 2024
- Merit Student, Peking University Sep 2024
- Freshman Scholarship & Dean’s Freshman Scholarship, EECS, Peking University Sep 2023

Competitive Programming (Selected)

- **Silver Medal, 5th Place**, The 2025 ICPC World Finals Sep 2025
- First Prize, UBIQuant Peking University Programming Contes May 2025
- Gold Medal, The 2024 ICPC East-Asia Continent Final Contest Dec 2024
- Second Place, The 2024 ICPC Asia Kunming Regional Contes Dec 2024
- Champion, The 2024 ICPC Asia Hangzhou Regional Contest Nov 2024
- Second Place, 2024 China Collegiate Programming Contest, Jinan Site Oct 2024
- Champion, TuSimple National Invitational College Programming Contest May 2024
- Gold Medal, The 9th China Collegiate Programming Contest (CCPC) Final Contest Mar 2024
- Gold Medal, The 2023 ICPC East-Asia Continent Final Contest Jan 2024
- Champion, The 2023 ICPC Asia Jinan Regional Contest Dec 2023
- Champion, 2023 China Collegiate Programming Contest (Shenzhen) Nov 2023
- Champion, TuSimple National Invitational College Programming Contest Apr 2023
- **Gold Medal, Best Female Player**, National Olympiad in Informatics (NOI) Aug 2022

Technical Skills

- **Programming:** C++ (expert, 10+ years), Python, Matlab, Haskell, Agda, OCaml, \LaTeX
- **Languages:** Chinese (native), English (TOEFL 113/120, Speaking 29)