

Tianyi Wu

wuty@stu.pku.edu.cn

EDUCATION

- **Peking University**

B.S. in Computer Science, Turing Class

- Expected graduation: July 2026

August 2022 - Present

Beijing, China

EXPERIENCE

- **ZhenFund**

Investment Internship

2025 - Present

Beijing

- **PKU Machine Learning Lab (advised by Prof. Liwei Wang)**

Research Internship

2024 - Present

Peking University

- **PKU DaGAME Lab (advised by Prof. Xiaotie Deng)**

Research Internship

2024 - Present

Peking University

- **Princeton AI Lab (advised by Prof. Mengdi Wang and Prof. Kaiqing Zhang)**

Research Internship

2025

Online

- **PKU TCS Lab (advised by Prof. Shaofeng Jiang)**

Research Internship

2023 - 2024

Peking University

- **PKU Course: Machine Learning**

Teaching Assistant

2024

Peking University

- **PKU Course: Practice of Programming in C&C++ (Honor Track)**

Teaching Assistant

2024

Peking University

- **CodinKid Company**

Lecturer

2024

Hefei, Anhui

PUBLICATION

- **[ICLR 2025] Online Clustering with Nearly Optimal Consistency**

T-H. Hubert Chan, Shaofeng H.-C. Jiang, Tianyi Wu, Mengshi Zhao (Equal Contribution)

- **[Preprint] New Sphere Packings from the Antipode Construction**

Ruitao Chen, Jiachen Hu, Binghui Li, Liwei Wang, Tianyi Wu (Equal Contribution)

- **[Preprint] Investigating Advanced Reasoning of Large Language Models via Black-Box Interaction**

Congchi Yin*, Tianyi Wu*, Yankai Shu, Alex Gu, Yunhan Wang, Jun Shao, Xun Jiang, Piji Li (* Equal Contribution)

RESEARCH PROJECTS

- **Sphere Packing**

Adviser: Prof. Liwei Wang

- Exploring how to leverage AI to solve specific research problems in mathematics.
- Publication: New Sphere Packings from the Antipode Construction

- **Automated NP Reduction**

Adviser: Prof. Xiaotie Deng

- Integration of AI and symbolism to achieve automated theorem proving for NP Reduction.

- **LLMs and Game**

Advisor: Prof. Mengdi Wang and Prof. Kaiqing Zhang

- Exploring the characteristics of LLMs in games and game theory.
- Publication: Investigating Advanced Reasoning of Large Language Models via Black-Box Interaction

- **Consistent Clustering**

Adviser: Prof. Shaofeng Jiang

- Developing online algorithms for clustering based on coresets.
- Publication: Online Clustering with Nearly Optimal Consistency

SERVICES

- **Peer Review:** Reviewer for SIAM journal on computing and STOC2025

SKILLS

- **Programming Languages:** C, C++, Rust, Python, Java, Haskell, Lean, Coq, Agda
- **Languages:** English, Mandarin (Native)

HONORS AND AWARDS

- **John Hopcroft Scholarship** September 2023, September 2024
John Hopcroft Foundation
- **Research Excellence Award** September 2024
Peking University
- **Academic Excellence Award** September 2023
Peking University
- **Silver Medal in National Olympiad in Informatics** August 2021
China Computer Federation

LEADERSHIP EXPERIENCE

- **Chair of Research Committee** September 2023 - Present
Center on Frontiers of Computing Studies, Peking University
 - Chaired CFCS Turing Research Forum in 2025 and participated in organizing the forum in 2023 and 2024.
 - Found and lead the monthly research seminars CS Frontier Tutorials in CFCS since 2024.

COURSES

- Mathematical Analysis (I, II, III)
- Advanced Algebra (I, II)
- Probability Theory and Statistics
- Discrete Mathematics and Structures
- Introduction to Numerical Analysis
- Introduction of Modern Applied Math
- Mathematical Logic
- Physics for Information Sciences
- Methods of Mathematical Physics
- Introduction to Computing (Honor Track, about functional programming)
- Practice of Programming in C&C++ (Honor Track, about modern algorithms)
- Data Structure and Algorithms (Honor Track)
- Introduction to Computer Systems
- Computer Networks (Honor Track)
- Operating System (Honor Track)
- Compiler Principles
- Software Foundations (about Coq and verification)
- Software Analysis (about program analysis and program synthesis)
- Software Engineering (Honor Track)
- Fundamentals of Artificial Intelligence
- Machine Learning
- Trustworthy Machine Learning (about interpretability, defenses, and privacy)
- Introduction to the Theory of Computation
- Foundations of Cryptography
- Quantum information
- Algorithmic game theory
- Study and Practice on Topics of Frontier Computing (I, II)