

Qiucheng Chen

[Email](#) [Personal Homepage](#) [GitHub](#)

EDUCATION

Tianjin University, China

Bachelor of Computer Science and Technology

Aug 2022 – Expected Jul 2026

- **Relevant Coursework:**

- Probability Theory and Statistics (100/100);
- Linear Algebra (94/100);
- Advanced Mathematics (90/100);
- C++ Programming Principles (96/100);
- [Computer System Practice](#) (94/100);
- [Computer Networks Practice](#) (98/100);
- Disposable Mathematics B (91/100);
- Parallel Computing (92/100);
- Fundamentals of Natural Language Processing (99/100);
- Computer Organization and Architecture (95/100);
- Physics B (91/100);

- **Honor and Award:**

- Academic Achievement Scholarship, 2024
- Outstanding Individual for Academic Progress and Advancement, 2024
- Outstanding student leader, 2024
- National Excellence Scholarship, 2023 (awarded to the top 5% of students)
- Outstanding Student of Sunshine Sports Initiative, 2023 (awarded to the top 1% of students)
- Liu Bao Scholarship, 2022 (awarded to the top-scoring student in the National Entrance Exam from each province, representing the top 0.6% of students)

EXPERIENCE

College of Intelligence and Computing, Tianjin University

- LMc (Language and Mind computing) Lab with Dr. Bo Wang Apr 2024 - Expected Jul 2026
 - First-authored a paper titled "Valuable Hallucinations: Realizable Non-Realistic Propositions" and submitted it to ACL 2025.
 - Introduced the concept of "valuable hallucinations" in large language models (LLMs), providing the first formal definition and systematic analysis of hallucination value.
 - Explored how hallucinations, traditionally seen as detrimental, can be controlled and optimized for creative and problem-solving purposes.
 - Demonstrated how ReAct prompting helps to reduce non-valuable hallucinations while increasing the proportion of valuable hallucinations.
 - Contributed to the advancement of AI-generated content by proposing a method for utilizing hallucinations for creative and exploratory applications rather than attempting to eliminate them entirely.
 - Conducting two key experiments in a human-computer interaction (HCI) project: analyzing decision-making through the Prisoner's Dilemma with LLM and human participants, and assessing loneliness to find alleviation strategies

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- Data Driving Failure Diagnosis Project, with Dr. Yu Wang, funded by City of Tianjin
Apr 2024 - Expected May 2025
 - Co-authored an article titled "Foundation Models for Prognostics and Health Management in Industrial Cyber-Physical Systems: A survey and roadmap", awaiting submission
 - Developed a graph network model for multi-sensor correlation learning in gas turbine systems to extract key fault features and improve detection accuracy
 - Applied causal inference methods to improve the clarity and the interpretability of the fault diagnosis model
 - Tianjin Key Laboratory of Machine Learning with Dr. Ruonan Liu
Aug 2023 – Apr 2024
 - Enhanced data analysis and integration with graph networks and causal inference to improve predictive maintenance and fault diagnosis for deep-sea devices, including drilling rigs and underwater robots
 - Performed comprehensive research and code reproduction on graph networks; work is accessible at [Trouverecc \(github.com\)](https://github.com/Trouverecc)

LEADERSHIP & INVOLVEMENT

Double Innovation Center, Faculty of Intelligence and Computing, Tianjin University

Director of Science and Technology Association

Aug 2023 – Sep 2024

- Organizing lectures and discussions on recent computer science advancements, and creating bi-weekly WeChat updates to share research developments with a broader audience
- Supporting freshmen by offering personalized learning strategies and clarifying challenging concepts from their courses, helping them navigate their academic journey

Class Peer Support Leader

Sep 2023 – present

- Helping fellow students reduce stress by conducting surveys, discussing personal issues, and providing psychological support

Computer Science and Math Tutor

Feb 2020 – present

- Have dedicated over 534 hours to volunteering, tutoring elementary school girls in math and basic computer skills, etc.
- Recognized as a "Star Volunteer" by the China Volunteer Service Network (CVSN) for impactful community contributions

SKILLS & INTERESTS

IT Skills: C/C++, Python, PyTorch, Java, System Verilog, HTML, JavaScript, CSS, SPSS, SQL, LaTeX

Research Interests: Large Language Models, Hallucination in LLMs, Machine Learning, Graph Neural Network

Language: IELTS 7.5 (L8.5, R7.5, W7.0, S6.0)

Interests: Swimming, Basketball, Badminton, Piano, Guitar, Zither, Painting