

Wei Wang (王威)

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RESEARCH INTERESTS

The theory of logic, and the application of logic to computer science and linguistics.

Current focus: Strategic reasoning, temporal logic, epistemic logic, formal verification; logical reasoning in LLMs; team semantics, formal semantics.

Broader interests: Logic, linguistics, computer science.

EDUCATION

Tsinghua University, Beijing, China

PhD in Philosophy (Logic)

Thesis proposal: *Strategic Abilities in Games: Information and Dependence* (supervised by Johan van Benthem, co-supervised by Valentin Goranko)

Sep. 2023 – Now

GPA: 4.0/4.0, Ranking: 1/104

Stockholm University, Stockholm, Sweden

Visiting PhD Student

Hosting Supervisor: Valentin Goranko

Dec. 2024 – Nov. 2025

Sun Yat-sen University, Guangzhou, China

Bachelor of Philosophy: Logic Major

Thesis: *The Proof-theoretic Strength of Some Combinatorial Principles in the Context of First-order Arithmetic* (in Chinese, supervised by Wei Wang [王玮], awarded the Excellent Undergraduate Thesis Prize by the university)

Sep. 2019 – June 2023

GPA: 4.4/5.0, Ranking: 1/32

PUBLICATIONS

Manuscripts

1. Chenwei Shi and Wei Wang. Effectivity Functions Without Superadditivity: Representation and Logic. 2026
2. Wei Wang. An Epistemic Extension of Temporal Logic of Coalitional Goal Assignments. 2026.
3. Valentin Goranko and Wei Wang. Logics for Modelling and Reasoning About Concurrent Multiplayer Games with Admissibility of Action Profiles. 2026.

Journal Papers

1. Fengxiang Cheng and Wei Wang. Task-Matched Logic Solvers for LLMs: Toward Explainable AI. Accepted by *Topoi*, 2026. (Corresponding author)

Articles in Proceedings

1. Wei Wang. An Epistemic Extension of Temporal Logic of Coalitional Goal Assignments, in Valeria Gradimondo and Emil Eva Rosina (eds.), *Proceedings of the ESSLLI 2025 Student Session*, pp. 12–21. PhilArchive, 2025. <https://philpapers.org/rec/GRAPOT-20>
2. Jialiang Yan, Chen Ju and Wei Wang. Disjunction and Parentheses, in Jialiang Yan, Mingming Liu, Dag Westerståhl and Xiaolu Yang (eds.), *The Connectives in Logic and Language. TLLM 2024*, pp. 127–148. Lecture Notes in Computer Science, vol 15410. Springer, 2025. (Corresponding author, EI indexed)
3. Fenrong Liu, Wei Wang and Sisi Yang. Towards a Logical Approach to Recommendations, in B. Liao, J. Pang and T. Rienstra (eds.), *Logics for New-Generation AI 2024: Proceedings of the Fourth International Workshop, Hangzhou, 2024*, pp. 47–65. College Publications, 2024. (Corresponding author)

Peer-Reviewed Short Papers / Extended Abstracts

1. Valentin Goranko and Wei Wang. Logics for Modelling and Reasoning About Concurrent Multiplayer Games with Admissibility of Action Profiles Paper. Accepted by the International Workshop on Logical Aspects in Multi-Agent Systems and Strategic Reasoning (LAMAS&SR 2026). (Corresponding author)
2. Valentin Goranko and Wei Wang. Logics for Modelling and Reasoning About Concurrent Multiplayer Games with Admissibility of Action Profiles Paper. Accepted by Advances in Modal Logic (AiML) 2026. (Corresponding author)
3. Valentin Goranko and Wei Wang. Modalities for Reasoning About Concurrent Multi-Agent Systems with Non-Admissible Action Profiles. Accepted by the Fifth Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning (TLLM 2026). (Corresponding author)

4. Wei Wang and Jialiang Yan. Intersecting Disjunction. Accepted by the Tenth International Conference on Logic, Rationality and Interaction (LORI 2025). (Corresponding author)

PRESENTATIONS

Conferences

- 2026
 1. Logics for Modelling and Reasoning About Concurrent Multiplayer Games with Admissibility of Action Profiles (poster presentation, joint work with Valentin Goranko). *Chinese Annual Conference on Mathematical Logic*. Tsinghua University, Beijing, China, 6 June.
 2. Modalities for Reasoning About Concurrent Multi-Agent Systems with Non-Admissible Action Profiles (poster presentation, joint work with Valentin Goranko). *Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning* (TLLM). Tsinghua University, Beijing, China, 5 April.
- 2025
 1. An Epistemic Extension of Temporal Logic of Coalitional Goal Assignments. *European Summer School in Logic, Language and Information (ESSLLI) Student Session*. Ruhr University Bochum, Bochum, Germany, 5 August.
- 2024
 1. Towards a Logical Approach to Recommendations (joint work with Fenrong Liu and Sisi Yang). *The Fourth International Workshop on Logics for New-Generation Artificial Intelligence* (LNGAI). Zhejiang University, Hangzhou, China, 15 June.

Invited Talks

- 2026
 1. Logical Modelling and Formal Verification of Multi-Agent Systems via Alternating-Time Temporal Logic. *‘Tsinghua Doctoral Students’ visit to Huangpu’ Academic Forum*. Guangzhou Institute of Technology, Xidian University, Guangzhou, China, 6 July
 2. Logics for Modelling and Reasoning About Concurrent Multiplayer Games with Admissibility of Action Profiles (joint work with Valentin Goranko). *Logic Seminar*. Beijing Normal University, Beijing, China, 24 April.

Other Seminar Talks

- 2026
 1. Representation of Effectivity Functions Allowing Dependence (joint work with Chenwei Shi) *Winter Meeting: Advances in Logic*. Tsinghua University, Beijing, China, 12 January.

SELECTED HONOURS AND AWARDS

- First Prize of Comprehensive Excellence Scholarship. Awarded by Tsinghua University, 2025.
- Second Prize of Comprehensive Excellence Scholarship. Awarded by Tsinghua University, 2024.
- China Scholarship Council Scholarship. Awarded by the China Scholarship Council, 2024.
- Excellent Undergraduate Thesis. Awarded by the Office of Education Administration of Sun Yat-sen University, 2023.
- China National Scholarship. Awarded by the Ministry of Education of the People’s Republic of China, 2022.
- Honorable Mention in the Mathematical Contest in Modeling. Awarded by the Consortium for Mathematics and its Applications, 2022.
- First Prize Scholarship for Excellent Students. Awarded by Sun Yat-sen University, 2022.
- First Prize in the Guangdong Provincial Competition of the Contemporary Undergraduate Mathematical Contest in Modeling. Awarded by the Department of Education of Guangdong Province and the China Society for Industrial and Applied Mathematics, 2021.
- Second Prize Scholarship for Excellent Students. Awarded by Sun Yat-sen University, 2021.
- China National Scholarship. Awarded by the Ministry of Education of the People’s Republic of China, 2020.
- First Prize Scholarship for Excellent Students. Awarded by Sun Yat-sen University, 2020.

WORK EXPERIENCE

Academic Service

• Journals

Reviewer of

1. *Synthese*.

• Conferences

Area Chair of

1. The Logic and Computation track of the European Summer School in Logic, Language and Information (ESSLLI) 2026 Student Session. Prague, Czech Republic, 2026.

Programme Committee member of

1. The AAI-26 Bridge Program on Logic & AI: Logical and Symbolic Reasoning in Language Models. Singapore, 2026.

External reviewer of

1. The Seventeenth International Symposium on Games, Automata, Logics, and Formal Verification (GandALF 2026). Aalborg, Denmark, 2026.
2. Advances in Modal Logic (AiML) 2026. University of Amsterdam, Amsterdam, the Netherlands, 2026.
3. The Fifth Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning (TLLM 2026). Tsinghua University, Beijing, China, 2026.

Organizer of

1. The Fifth Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning (TLLM 2026). Tsinghua University, Beijing, China, 2026.
2. The Third International Workshop on Logic and Philosophy. Tsinghua University, Beijing, China, 2024.
3. The Fourth Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning (TLLM IV). Tsinghua University, Beijing, China, 2024.

• Seminars

Organizer of

1. Logic Reading Program. Tsinghua University, Beijing, China, 2025 – Now.
2. Advances in Logic and Artificial Intelligence. Tsinghua University, Beijing, China, 2025 – Now.
3. Tsinghua Logic Colloquium. Tsinghua University, Beijing, China, 2024 – Now.
4. Tsinghua Logic Salon. Tsinghua University, Beijing, China, 2023 – Now.
5. Tsing Ch'a Session. Tsinghua University, Beijing, China, 2023 – Now.
6. Model Theory Seminar. Sun Yat-sen University, Guangzhou, China, 2021.

• New media accounts

1. Edit for and run *Shuimu Logic* (水木逻辑), the WeChat Official Account of the Tsinghua University – University of Amsterdam Joint Research Centre for Logic, 2023 – Now.

Teaching Assistance

• Tsinghua University

1. Modal Logic and Its Applications (Taught by Jeremy Seligman). Spring of 2026.
2. Foundations of Logic (Taught by Dag Westerståhl). Spring of 2026.
3. Philosophical Logic (Taught by Fenrong Liu, Chenwei Shi, Valentin Goranko, Junhua Yu, Sonja Smets, and Alexandru Baltag). Spring of 2024.

Internship

• Huawei Technologies Co., Ltd.

Computational Mathematics Group, Theory Lab, Central Research Institute, 2012 Lab

Developed C++ libraries for solving sparse linear systems.

Mentor: Yichong Wu

Shenzhen, China

Dec. 2022 – June 2023

Student Activities

• Tsinghua University

Core Member of the Department of Employment and Practice, Youth League General Branch of the School of Humanities

July 2023 – June 2024

• Sun Yat-sen University

Academic Representative of the Class of Logic Major 2019

Oct. 2021 – June 2023

Person in Charge of the Department of Academic Communication, Students' Union of the Department of Philosophy

Sep. 2020 – Oct. 2021

Member of the Department of Academic Communication, Students' Union of the Department of Philosophy

Sep. 2019 – Sep. 2020

LANGUAGES

- Native: Ningbonese (Wu), Mandarin.
- Fluent: English (IELTS 8.5, CEFR C2), Japanese, Swedish, Shanghainese (Wu), Cantonese (Yue).
- Intermediate: Hokkien (Southern Min).
- Understand: Classical Chinese, Wenzhounese (Wu).
- Upper beginner: French, German, Korean, Spanish, Latin.

SKILLS

- **Programming:** Familiar with C++, C (obtained Grade 2 (C Language) Certificate of the National Computer Rank Examination of China), Python, and Java.
- **Computer networking:** Obtained Grade 3 (Network Technology) Certificate of the National Computer Rank Examination of China.