

# Haoran Ye

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[🌐 Homepage](#) | [🔍 Google Scholar](#) | [🐙 GitHub](#)

## EDUCATION

**Peking University | School of Intelligence Science and Technology (SIST)** Sep 2024 – Jun 2029 (expected)

- Ph.D. in Intelligence Science and Technology (direct-track); Rank 1/33, GPA 3.87/4.00
- Advisor: Prof. Guojie Song; Co-advisor: Prof. Xin Zhang

**Soochow University | School of Computer Science and Technology** Sep 2020 – Jun 2024

- B.Eng. in Artificial Intelligence; Rank 1/250, Average Grade 95/100
- Student of the Year, Jiangsu Province (ranked 2nd among all undergraduate students in Jiangsu)

## GRANTS

**NSFC Youth Student Basic Research Project (Ph.D. student grant), Principal Investigator** Dec 2025 – present

- *Key Technologies for Building General-Purpose Psychometric Large Language Models.* (The only recipient in SIST.)

**CAST Young Talent Cultivation Project for Doctoral Students, Grantee** Dec 2025 – present

**National College Student Innovation and Entrepreneurship Program, Project Lead** Jun 2022 – Jun 2024

- National Key Support Project; completed with the highest rating (Excellent).

## PUBLICATIONS

- Agents evolve only as far as the signals that steer them; my research builds both sides of this loop: the measurement science that produces trustworthy signals, and the self-evolving agents those signals steer.
- 1,400+ total citations on Google Scholar; 1,000+ citations on first-author papers (as of Sep 2026).

### Measurement Science: Benchmarks, Psychometrics & Alignment

Building reliable signals that quantify what AI systems can do and what they value.

- **Large Language Model Psychometrics: A Systematic Review of Evaluation, Validation, and Enhancement** [link](#)  
H. Ye, J. Jin, Y. Xie, X. Zhang, G. Song. arXiv:2505.08245, 2025.  
The first systematic review of LLM psychometrics, unifying evaluation, validation, and enhancement.
- **Generative Psycho-Lexical Approach for Constructing Value Systems in Large Language Models** [link](#)  
H. Ye, T. Zhang, Y. Xie, L. Zhang, Y. Ren, X. Zhang, G. Song. ACL 2025 Main.  
Constructs LLM-native, interpretable value systems for post-training value alignment.
- **Measuring Human and AI Values Based on Generative Psychometrics with Large Language Models** [link](#)  
H. Ye, Y. Xie, Y. Ren, H. Fang, X. Zhang, G. Song. AAAI 2025.  
Trains value-measurement LLMs, establishing a unified measurement framework for human and AI values.
- **ValueBench: Towards Comprehensively Evaluating Value Orientations and Understanding of LLMs** [link](#)  
Y. Ren, H. Ye, H. Fang, X. Zhang, G. Song. ACL 2024 Main.  
The first comprehensive benchmark for evaluating value orientations and understanding of LLMs.
- **Agent-ValueBench: A Comprehensive Benchmark for Evaluating Agent Values** [link](#)  
H. Dong, Q. Feng, K. Jiang, H. Ye, X. Zhang, G. Song. arXiv:2605.10365, 2026.
- **Agents' Last Exam** [link](#)  
Y. Sun, X. Han, W. Zhang, et al. (including H. Ye). arXiv:2606.05405, 2026.

### Self-Evolution: Evaluation-Driven Agent Improvement

Harnessing evaluation signals to drive agent self-improvement.

- **Meta Context Engineering via Agentic Skill Evolution** [link](#)  
H. Ye, X. He, V. Arak, H. Dong, G. Song. ICML 2026.  
Represents context as files and code, and co-evolves context-engineering skills with context, overcoming static agent harnesses.
- **ReEvo: Large Language Models as Hyper-Heuristics with Reflective Evolution** [link](#)  
H. Ye, J. Wang, Z. Cao, F. Berto, C. Hua, H. Kim, J. Park, G. Song. NeurIPS 2024.  
Proposes reflective evolution, combining LLM reflection with evolutionary computation for open-ended constructive search and LLM test-time scaling; *cited by multiple Google DeepMind papers including AlphaEvolve.*
- **NeuReasoner: Towards Explainable, Controllable, and Unified Reasoning via Mixture-of-Neurons** [link](#)  
H. Dong, K. Jiang, H. Ye, W. Zhu, Z. Kang, G. Song. ACL 2026 Main, Oral.

- **AutoEP: LLMs-Driven Automation of Hyperparameter Evolution for Metaheuristic Algorithms** [link](#)  
Z. Xu, Y. Zhang, W. Bao, H. Wang, M. Chen, **H. Ye**, W. Jiang, H. Yan, J. Wang. ICLR 2026, Oral.
- **VRPagent: LLM-Driven Discovery of Heuristic Operators for Vehicle Routing Problems** [link](#)  
A. Hottung, F. Berto, C. Hua, N. G. Zepeda, D. Wetzels, M. Römer, **H. Ye**, D. Zago, et al. arXiv:2510.07073, 2025.

## Foundations in Evolutionary & Neural Optimization

The optimization machinery underlying self-evolution, applied to combinatorial optimization and chip design.

- **DeepACO: Neural-Enhanced Ant Systems for Combinatorial Optimization** [link](#)  
**H. Ye**, J. Wang, Z. Cao, H. Liang, Y. Li. NeurIPS 2023.  
Enhances ant colony intelligence with graph neural networks; *cited by the group of Turing Award laureate Yoshua Bengio*.
- **GLOP: Learning Global Partition and Local Construction for Solving Large-Scale Routing Problems in Real-Time** [link](#)  
**H. Ye**, J. Wang, H. Liang, Z. Cao, Y. Li, F. Li. AAAI 2024.  
A learnable global-partition + local-construction strategy for real-time large-scale routing.
- **RL4CO: An Extensive Reinforcement Learning for Combinatorial Optimization Benchmark** [link](#)  
F. Berto, C. Hua, J. Park, L. Luttmann, Y. Ma, F. Bu, J. Wang, **H. Ye**, M. Kim, et al. KDD 2025, Oral.
- **TransPlace: Transferable Circuit Global Placement via Graph Neural Network** [link](#)  
Y. Hou, **H. Ye**, Y. Zhang, S. Xu, G. Song. KDD 2025.
- **RoutePlacer: An End-to-End Routability-Aware Placer with Graph Neural Network** [link](#)  
Y. Hou, **H. Ye**, Y. Zhang, S. Xu, G. Song. KDD 2024.

## SELECTED HONORS AND AWARDS

- 2025–2026: Beijing Municipal Merit Student (the only recipient in SIST); National Scholarship; PKU Presidential Scholarship (the only recipient in the 2024 SIST cohort).
- 2024: Student of the Year, Jiangsu Province (ranked 2nd among all undergraduate students); Excellent Undergraduate Thesis of Jiangsu Province; May Fourth Medal of Innovation, Soochow University (the only undergraduate recipient).
- 2022–2023: National Scholarship; Provincial Merit Student; Pacemaker to Merit Student.

## ACADEMIC SERVICES

- Reviewer (since 2024): NeurIPS, ICML, ICLR, ACL ARR, TMLR, etc.

## LEADERSHIP AND ACTIVITIES

- Vice President of the Graduate Student Union, SIST, PKU; Captain of the SIST Men's Basketball Team.
- Member of the PKU Rope Skipping Team; silver medal at the National Rope Skipping Competition of China; five individual gold medals at the PKU Sports Festival.