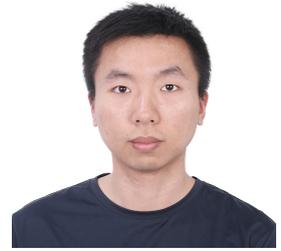


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Education

- 2021 – 2025 **Ph.D. Student (Integrated Master-Ph.D. Program), Software Engineering, Beihang University (985),** School of Computer Science and Engineering, Beijing, China. **Advisor: Prof. Angsheng Li, Prof. Hao Peng.**
- 2017 – 2021 **B.Sc., Software Engineering, Zhejiang Normal University,** College of Mathematics and Computer Science, Jinhua, China. **GPA: 3.96/5.0 (Rank 1/59), CET-6: 614** (College English Test).

Research Publications

Conference Proceedings

- 1 **Su, Dingli,** H. Peng, Y. Pan, and A. Li, “A survey of structural entropy: Theory, methods, and applications,” in *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, 2025.
- 2 **Su, Dingli,** H. Peng, G. Zeng, P. Li, A. Li, and Y. Pan, “Emergence of cooperation in multi-agent reinforcement learning via coalition labeling and structural entropy,” in *Proceedings of the SIAM International Conference on Data Mining (SDM)*, 2025.

Journal Articles

- 1 X. Zeng, H. Peng, **Su, Dingli,** and A. Li, “Hierarchical decision making based on structural information principles,” *Journal of Machine Learning Research*, vol. 26, no. 182, pp. 1–55, 2025.
- 2 H. Peng, **Su, Dingli,** A. Li, and S. Sun, “Structural-entropy-minimization method for estimating embedding dimension in graph neural networks,” *Journal of Cyberspace Security Science*, vol. 1, no. 3, pp. 107–125, 2023, Chinese Core Journal; student first author.

Manuscripts

- 1 “Synergistic large vision model pipeline for precise diagnosis of precancerous esophageal neoplasia,” Under review at Nat. Cell Biol., 2025.
- 2 X. Zhao, H. Peng, **Su, Dingli,** X. Yu, and P. S. Yu, “Uncertainty quantification for LLM hallucination detection via semantic structural entropy,” Submitted to UAI, 2025.

Miscellaneous Experience

Research Projects and Grants

- 2025–present ■ **Structural-Information-Theoretic Collaboration Mechanisms for Metaverse Settings** (NSFC Special Project). Student backbone; designed coalition-labeling experiments, graph-of-agent tooling, and measurement protocols for multi-agent cooperation studies.
- 2024–present ■ **Medical Foundation Model for Esophageal Cancer: R&D and Application Demonstration** (Hebei Provincial Key R&D). Student backbone; co-authored proposal, led hallucination detection module (semantic embedding + structural entropy), and defined evaluation workflows.
- 2021–present ■ **Porous Rare-Earth Catalysis and RE–Noble Metal Catalytic Materials** (National Key R&D Program). Student backbone for GNN pipelines; developed data curation, structural-entropy-regularized graph encoders, and property-prediction workflows with uncertainty estimates.
- 2025–present ■ **Structural-Information-Enhanced Cognition for Ultra-Scale Networks and Public-Opinion Decision Support** (NSFC–Enterprise Joint Fund, proposal). Lead drafter; defined technical roadmap, intervention-effect metrics, and cross-institution collaboration plan.
- **Bridge Health Monitoring Foundation Model** (Hebei Provincial Key R&D). Student backbone; contributing to multi-modal sensing integration, structural-entropy priors, and safety-focused explainability.

Patents

- 2025 ■ **Multi-agent service collaboration based on collaboration graphs and large language models** (CN202510143475.4). CN invention patent under substantive examination; co-inventor (2/6); student first author.
- **Coalition-labeling and structural-information based cooperative optimization for UAV swarms** (CN202510181821.8). CN invention patent under substantive examination; co-inventor (2/6); student first author.
- 2022 ■ **Interpretable-dimension graph neural network method for protein classification** (CN202210238557.3). CN invention patent under substantive examination; co-inventor (2/5); student first author.
- 2022–2025 ■ **Eight additional CN invention patents, 3 authorized**, spanning hypergraph recommendation, explainable GNNs, structural-entropy retrieval, MoE dialogue, structural-information point-cloud generation, deceptive-account detection, hallucination mitigation, and medical imaging; inventor positions 3–6.

Awards and Honors

- 2025 ■ **Second Prize (Team Lead)**, AI Challenge — Agent Decision Algorithms (Advanced Track), Regional.
- **Third Prize (Team Lead)**, AI Challenge — Embodied RL Motion Control, Regional.
- 2024 ■ **First Prize (Team Lead)**, Hebei Scenario Innovation Competition (Low-Altitude Economy).
- **50m & 100m Backstroke 2nd Place**, University Swim Competition.
- 2019 ■ **ACM-ICPC East Central Final**, Silver Medal.
- 2017–2019 ■ **ACM-ICPC Regional Contests**, Two Silver Medals and Two Bronze Medals.
- 2017–2020 ■ **Provincial Government Scholarship; University First-Class Scholarship.**