

ZIFU TAO

D.O.B: 09/28/2003 | Email: 2253323@tongji.edu.cn | Tel: +86-18049037002

EDUCATION

School of Computer Science and Technology, Tongji University 09/2022 – 06/2026
• Bachelor of Software Engineering GPA: 4.12/5.0 (86.24/100)
Oxford Prospects Programmes (Non-degree Summer Programme) 07/2024 – 08/2024
• Completed the Oxford University Summer Course of STEM and Final Project Grade: A-
Honors: Second Prize for National College Student Mathematical Modeling Competition, Third Prize for Shanghai Blue Bridge Cup Programming Contest
Membership: Student Member of Chinese Information Processing Society of China (CIPS), Student Member of IEEE

RESEARCH EXPERIENCE

Chinese Information Processing Laboratory, Institute of Software Chinese Academy of Sciences 07/2025 – Present
Advisor: Prof. Le Sun; Co-advised by Prof. Yaojie Lu
• **Data2MCP: MCP-based multi-source data retrieval system (NeurIPS 2026)**
Designed to enable large models to interact efficiently with multiple external data sources, breaking data silos and improving retrieval performance over traditional RAG frameworks.
• Contributed to benchmarking and fine-tuning experiments with AI agents, Gained solid experience in model alignment and multi-source data integration.
Key Laboratory of Intelligent Networks and Network Security, School of Cyber Science and Engineering, Xi'an Jiaotong University 09/2024 – Present
Advisor: Prof. Bo Han; Co-advised by Prof. Tian Zhou
• **Constraint-Based Multi-Strategy Quality Enhancement for Knowledge Graphs (TKDE)**
Proposed a constrained optimization framework for multi-dimensional KG quality optimization, designed a three-strategy collaborative mechanism for targeted defect repair, and achieved remarkable cross-domain quality improvement on low-quality KG data.
• **RL-Driven Knowledge Graph Quality Optimization with Automatic Rule Generation (EMNLP 2025)**
Developed a DQN-based closed-loop framework for KG and rule co-optimization, proposed an LLM-based dual-strategy automatic rule generation method, and realized adaptive decision-making for KG enhancement and rule generation.

COLLABORATIVE PROJECTS

Innovation Laboratory, School of Computer Science and Technology, Tongji University 10/2024 – 06/2025
Advisor: Prof. Changqing Yin
• **Aviation Meal Management System (Collaborative Research Project with China Eastern Airlines)**
Independently built an airline meal prediction system using YOLO for real-time demand forecasting, achieved company goals.
• **Automotive Wiring Harness Matching System (Collaborative Research Project with NIO)**
Improved wire harness allocation efficiency using LLMs and LangChain, awarded as Shanghai Innovative Project.
Machine Intelligence Laboratory, School of Computer Science and Technology, Tongji University 12/2023 – 05/2024
Advisor: Prof. Qingjiang Shi
• **Dynamic Hybrid Beamforming (HBF) Architecture Optimization**
Researched HBF networks under real-time sparse distributions, designed hybrid architectures to improve system capacity and efficiency; optimized codebase and validated model performance experimentally.

ACADEMIC COMPETITIONS

Campus express intelligent obstacle avoidance system based on Phytium (GitHub 100+ stars) 03/2025 – 06/2025
• Developed an intelligent campus vehicle system using Phytium ARM and ROS, focusing on autonomous obstacle avoidance through real-time LiDAR-based perception and path planning algorithms, successfully tested and put into use on campus.
Diabetes Prediction Model Based on MindSpore (Top-ranked in Kaggle competition) 05/2025 – 06/2025
• Developed a diabetes prediction model on Huawei MindSpore with high prediction accuracy against actual data.

TEACHING & EXTRACURRICULAR EXPERIENCES

Tongji University — Teaching Assistant Fall 2025
• **Course:** Information Security Fundamentals
• Assisted instructor in grading assignments, explaining exercises to students and evaluation of final project defenses.
Google Club, School of Computer Science and Technology, Tongji University 10/2023 - Present
• Participated in organizing collaborations with ByteDance, Tencent, and Alibaba, and coordinated college innovation competitions to promote student research and entrepreneurship.