### Jiawen Li

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**J** (+1) 734-780-0976 **♀** Ann Arbor, MI

#### **Research Interests**

Human–Computer Interaction (HCI), Human-AI Interaction, Web Automation, Intelligent User Interfaces

#### **Education**

2024 – 2026 University of Michigan, Ann Arbor, MI

B.S. in Data Science Engineering (Dual Degree Program)

2022 – 2026 **Shanghai Jiao Tong University**, Shanghai, China

B.S. in Mechanical Engineering (Dual Degree Program)

#### **Publications**

#### **Conference Proceedings**

2025 [C.3] ALLOY: Generating Reusable Agent Workflows from User Demonstration

Li, J., Ning, Z., Tian, Y., Li, T. (In Submission to IUI 2026)

2025 [C.2] Dark Patterns Meet GUI Agents: LLM Agent Susceptibility to Manipulative Interfaces and the Role of Human Oversight

Tang, J., Chen, C., *Li, J.*, Zhang, Z., Guo, B., Khalilov, I., Gebreegziabher, S. A., Yao, B., Wang, D., Ye, Y., Li, T., Xiao, Z., Yao, Y., Li, T. J.-J. (*In Submission to CHI 2026*)

2025 [C.1] Multi-Click: Cross-Tab Web Automation via Action Generalization Zhang, J., *Li*, *J.*, Arab, M., Oney, S.

Proceedings of the ACM Symposium on User Interface Software and Technology (UIST 2025)

#### **Demos / Posters**

## 2025 [D.1] AgentPbD: Interactive Agentic Workflow Generation from User Demonstration on Web Browsers

Li, J., Ning, Z., Tian, Y., Li, T.

IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2025), Demo Track

#### **Journals**

# 2025 [J.1] Towards Zero-Shot Robot Tool Manipulation in Industrial Context: A Modular VLM Framework Enhanced by Multimodal Affordance Representation

Zhou, Q., Gu, Y., *Li, J.*, Feng, B., Li, B., Bi, Y. *Robotics and Computer-Integrated Manufacturing* 

#### **Research Experience**

#### Jun 2025 – Sept University of Notre Dame

2025 Undergraduate Research Assistant

Advisor: Prof. Toby Jia-jun Li

Developed **ALLOY**, a demonstration-to-workflow browser extension that abstracts user interactions into parametric graphs and generalizes them into reusable agent workflows via LLM and MCP frameworks.

#### Jan 2025 – Apr University of Michigan

2025 Undergraduate Research Assistant

Advisor: Prof. Steve Oney

Built **MultiClick**, a browser-based HCI system enabling cross-tab action generalization and automation using web scraping, service workers, and React-based interaction visualization.

#### Jan 2024 – May Shanghai Jiao Tong University

2024 Undergraduate Research Assistant

Advisor: Prof. Youyi Bi

Designed a zero-shot robotic operation framework integrating reinforcement learning and knowledge transfer via Unity3D simulations to improve industrial task generalization.

#### **Teaching Experience**

#### **Teaching Assistant**

FA2023 **VG101: Introduction to Computer and Programming**, UM-SJTU Joint Institute

Led labs, discussions, and office hours each week, and graded assignments for 100+ students.

Received the Excellent Teaching Assistant Award (2023).

#### **Industry Experience**

2023

Jul 2023 – Sept Data Analyst Intern, XD Inc. – Shanghai, China

Performed player behavior analysis and text mining using BERT, SQL, and Python for the game *Sword of Suzuliana*, providing data-driven UX optimization recommendations.

#### **Honors and Awards**

May 2024 Excellent Teaching Assistant Award, UM-SJTU Joint Institute

Jan 2024 Third Prize, China Undergraduate Mathematical Contest in Modeling (CSIAM)

#### **Technical Skills**

**Programming Languages:** C/C++, Python, HTML/CSS/JavaScript, TypeScript,

SQL, R, MATLAB, C#

Frameworks & Tools: LangChain, OpenAI Agents SDK, React, Vue, Flask, Unity3D,

RStudio, SolidWorks, Manifest V3