Chaoran Chen

Curriculum Vitae

Department of Computer Science and Engineering
College of Engineering
University of Notre Dame
Notre Dame, IN 46556 USA

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Research Interests

Human-Computer Interaction (HCI), Human-AI Interaction, LLM Privacy and Security.

Education

Ph.D. in Computer Science and Engineering   2022 – 2026
University of Notre Dame, *Notre Dame, IN*
Department of Computer Science and Engineering
Advisors: Toby Jia-jun Li and Yanfang Ye

M.S. in Educational Technology and Applied Learning Sciences   2021 – 2022
Carnegie Mellon University, *Pittsburgh, PA*
Human Computer Interaction Institute, School of Computer Science

B.E. in Industrial Design   2015 – 2020
Tongji University, *Shanghai, China*
College of Design and Innovation

Selected Honors and Awards

Third prize of Tech Ethics Hackathon hosted by Notre Dame-IBM Technology Ethics Lab   2024
Best Implementation Award, MobileHCI 2022   2022
Merit Scholarship ($7,000), Carnegie Mellon University   2021

Major Refereed Conference Papers

(* indicate equal contribution)

[C.9]   **Why Am I Seeing This: Democratizing End User Auditing for Online Content Recommendations**
Chaoran Chen, Leyang Li, Luke Cao, Yanfang Ye, Tianshi Li, Yaxing Yao, and Toby Jia-jun Li
Proceedings of the 38th Annual ACM Symposium on User Interface Software and Technology (UIST 2025)

[C.8]   **Towards a Design Guideline for RPA Evaluation: A Survey of Large Language Model-Based Role-Playing Agents**
Chaoran Chen, Bingsheng Yao, Ruishi Zou, Wenyue Hua, Weimin Lyu, Toby Jia-jun Li, and Dakuo Wang
Findings of the Association for Computational Linguistics (ACL 2025)

[C.7]   **CLEAR: Towards Contextual LLM-Empowered Privacy Policy Analysis and Risk Generation for Large Language Model Applications**
Chaoran Chen, Daodao Zhou, Yanfang Ye, Toby Jia-jun Li, and Yaxing Yao
Proceedings of the 30th ACM Conference on Intelligent User Interfaces (IUI 2025)

[C.6]   **Careful About What App Promotion Ads Recommend! Detecting and Explaining Malware Promotion via App Promotion Graph**
Shang Ma*, **Chaoran Chen***, Shao Yang, Shifu Hou, Toby Jia-Jun Li, Xusheng Xiao, Tao Xie, and Yanfang Ye
The Network and Distributed System Security Symposium (NDSS 2025)

[C.5]   **Symbolic Prompt Tuning Completes the App Promotion Graph**
Zhongyu Ouyang, Chunhui Zhang, Shifu Hou, Shang Ma, **Chaoran Chen**, Toby Li, Xusheng Xiao, Chuxu Zhang & Yanfang Ye
Machine Learning and Knowledge Discovery in Databases (ECML PKDD 2024)

[C.4]   **An Empathy-Based Sandbox Approach to Bridge the Privacy Gap among Attitudes, Goals, Knowledge, and Behaviors**
Chaoran Chen, Weijun Li, Wenxin Song, Fanny Ye, Yaxing Yao, and Toby Jia-Jun Li
Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2024)

[C.3]   **ARDW: An augmented reality workbench for printed circuit board debugging**
Ishan Chatterjee, Tadeusz Pforte, Aspen Tng, Farshid Salemi Parizi, **Chaoran Chen** and Shwetak Patel
Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (UIST 2022)

[C.2]   **Patterns for Representing Knowledge Graphs to Communicate Situational Knowledge of Service Robots**
Shengchen Zhang, Zixuan Wang, **Chaoran Chen**, Yi Dai, Lyumanshan Ye and Xiaohua Sun
Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2021)

[C.1]   **AI-Sketcher: A Deep Generative Model for Producing High-Quality Sketches**
Nan Cao, Xin Yan, Yang Shi, and **Chaoran Chen**
Proceedings of the AAAI Conference on Artificial Intelligence (AAAI 2019)

Refereed Workshop Papers

[W.3]   **Toward a Human-centered Evaluation Framework for Trustworthy LLM-powered GUI Agents**
Chaoran Chen, Zhiping Zhang, Ibrahim Khalilov, Bingcan Guo, Simret A Gebreegziabher, Yanfang Ye, Ziang Xiao, Yaxing Yao, Tianshi Li, and Toby Jia-Jun Li
CHI 2025 Workshop on Human-Centered Evaluation and Auditing of Language Models (HEAL)

[W.2]   **Evaluating the LLM Agents for Simulating Humanoid Behavior**
Chaoran Chen, Bingsheng Yao, Yanfang Ye, Dakuo Wang, and Toby Jia-Jun Li
CHI 2024 Workshop on Human-Centered Evaluation and Auditing of Language Models (HEAL)

[W.1]   **Prompt Learning Unlocked for App Promotion in the Wild**
Zhongyu Ouyang, Shifu Hou, Shang Ma, Chaoran Chen, Chunhui Zhang, Toby Jia-Jun Li, Xusheng Xiao, Chuxu Zhang, and Yanfang Ye
NeurIPS 2023 Workshop on New Frontiers in Graph Learning (GLFrontiers)

Relevant Research Experience

Student Researcher   Jul. 2025–Nov. 2025
Workspace Abuse & Safety Protections (WASP) Team
Google, Sunnyvale, CA, USA
Mentor: Dr. Dayu Yuan

Research Intern   Oct. 2024–Dec. 2024
Technology Harm Prevention Group
Max Planck Institute for Security and Privacy, Bochum, Germany
Mentor: Dr. Abraham Mhaidli

Teaching Experience

Teaching Assistant, *CSE 40567: Computer Security*   Spring 2025
Department of Computer Science and Engineering, University of Notre Dame

Teaching Assistant, *CSE 40625: Machine Learning*   Fall 2023
Department of Computer Science and Engineering, University of Notre Dame

Teaching Assistant, *05-738: Evidence-Based Educational Design*   Fall 2022
Human-Computer Interaction Institute, Carnegie Mellon University

Teaching Assistant, *05-440/05-640: Interaction Techniques (IxT)*   Spring 2022
Human-Computer Interaction Institute, Carnegie Mellon University

Professional Service Academic Service

Academic Service
  Program Committee Member
    HAIPS workshop@ACM CCS (2025)
  Conference Reviewer
    ACM CHI (2023-2025), **ACM CSCW** (2025), **ACM IUI** (2025)
    Received "special recognitions" for outstanding reviews for ACM CHI 2024 Late-Breaking
    Work, ACM CSCW 2025, and ACM IUI 2025 (twice).
  Journal Reviewer
    ACM TOPS (2022)
Departmental and Community Service
  Student Volunteer, ACM MobileHCI 2022