# Yihong Chen

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# **EDUCATION**

University of Delaware

Aug 2021 - May 2025 (Expected)

B.S. in Mathematics and Data Science GPA: 4.0/4B.S. in Management Information Systems GPA: 4.0/4

Minor in Business Analytics

Southwestern University of Finance and Economics Sep 2021 - May 2025 (Expected)

B.M. in Information Management and Information Systems GPA: 4.0, Ranked in top 10%

#### CONFERENCE PRESENTATIONS

Yihong Chen, Yimeng Dong, Daning Hu, Harry Wang. "Enhancing Business Research Analytics: A Demonstrative Application of GraphRAG." Workshop on Information Systems and Technology (WITS), Bangkok, Thailand, 18-20 December, 2024.

Yihong Chen, Tao Wang, Shujing Wang, Yifei Tang, Qiqi Yu, Peijia Chen. "The Influence Mechanism of Self-endorsement of We-media Short Videos." China Association for Information Systems (CNAIS), Shanghai, China, 2-4 December, 2022.

# WORKING PAPERS

Yihong Chen, Xiao Qian, Shangjia Dong. "Large Language Models for Human Evacuation Risk Perception: Capabilities and Challenges"

Stage: Drafting.

Xiao Qian, Yihong Chen, Rachel Davidson, Shangjia Dong. "Contrastive Learning of Household-Housing Relationship using Large Language Model."

Stage: Preparing for submission.

# RESEARCH PROJECTS

Can Large Language Model Simulate Human Behavior in Disaster Scenario?

(NSF REU, Jul 2024 - Present, \$3,500)

Role: Lead Researcher, Supervised by: Prof. Shangjia Dong at UD

- · Obtaining real human behavior data during disaster scenarios is challenging. This project leverages in-context learning to simulate LLMs as decision-making agents in a hurricane scenario, demonstrating that our approach closely aligns the LLM responses with observed human behavior.
- · Compared to existing machine learning methods, this approach demonstrates a significant improvement in both accuracy and generalizability.
- · The paper is currently being drafted and is expected to be submitted in early 2025.

# Leveraging Retrieval-Augmented Generation (RAG) and Supervised Fine-Tuning (SFT) for Business Research Analytics

(UD Undergraduate Research Scholar, Jun 2024 - Aug 2024, \$4,000)

Role: Lead Researcher, Supervised by: Prof. Harry Wang at UD

- · This project aims to enhance business research analytics through advanced AI techniques.
- · Crawled more than 220,000 articles from UTD 24 and FT 50 journals.
- · Fine-tuned a Llama 3.1 7B model to conduct business research ideation.
- · Implemented GraphRAG pipeline to enhance advanced research paper retrieval.
- · Work accepted by Workshop on Information Systems and Technology (WITS) 2024.
- · Received the *Industry Scholar Award* with an additional \$3,000 for conference presentation.

#### Influence Mechanism of Self-endorsement of We-media Short Video

(National Undergraduate Training Program for Innovation, May 2022 - Dec 2023, \(\frac{\pma}{2}\)20,000)

Role: Project Lead, Supervised by: Prof. Tao Wang at SWUFE

- $\cdot$  This research investigates the influence mechanisms through of self-endorsement on TikTok.
- · Constructed a Structural Equation Model (SEM) with WoM and TAM.
- · Work accepted and presented at the anual conference of China Association for Information Systems (CNAIS) 2022.

# RESEARCH INTERESTS

Topics: Large Language Model, Human-AI Interaction, Cybersecurity.

Methodologies: Econometrics, Text Mining, Machine Learning (Computational Design Science).

# TEACHING EXPERIENCE

Teaching Assistant, Intro to Gen AI (Graduate Course), MISY667

Apr 2024 - Jun 2024

First course focusing on Generative Artificial Intelligence at Delaware.

Instructor: Harry Wang, Class size: 30.

Teaching Assistant, Database Design and Implementation, MISY330

Jan 2024 - Jun 2024

Core course for MIS students at University of Delaware, using MySQL.

Instructor: Leting Zhang, Class size: 100.

# INDUSTRIAL EXPERIENCE

Algorithm Engineer Intern, China Telecom

Jun 2023 - Aug 2023

- · Developed and automated data cleaning and feature extraction processes for online reviews.
- · Trained and validated a sentiment analysis model, and documented results.

# **SKILLS**

Coding: Python (CUDA, Pytorch, etc.), Git Bash, SQL, C/C#, Java & HTML/CSS.

Documentation: LaTeX, Quarto, Markdown, Microsoft Office Suite, Overleaf.

Language: English (Proficient, IELTS 7.0), Mandarin (Native).

# AWARDS AND FUNDING

Winter Fellow Award, University of Delaware, \$500	Dec 2024
Undergraduate Research Scholar, University of Delaware, \$4,000	Jun 2024 - Aug 2024
NSF Research Experiences for Undergraduates (REU), \$3,500	Jul 2024
Industry Scholar Award, University of Delaware, \$3,000	Jun 2024
Dean's List, University of Delaware	Every Semester at UD
Research and Innovation Scholar, SWUFE, ¥500	Nov 2022
Scholarship for Innovative Talents, SWUFE, \(\xi_2,000\)	Oct 2022
Academic Scholarship, SWUFE, ¥300 - ¥500	Every Semester at SWUFE

# LEADERSHIP

UD Student Alumni Ambassador, University of Delaware
 President, SWUFE Fujian Alumni Association
 Principal French Horn, SWUFE Symphony Orchestra
 Sep 2021 - May 2023