

## EDUCATION

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<b>The University of Texas at Austin</b> M.S. in Computer Science, GPA: 3.80/4.00	Austin, TX 2024–Current
<b>The University of Texas at Dallas</b> B.S. in Computer Science, GPA: 3.94/4.00	Dallas, TX 2020–2024

## EXPERIENCE

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<b>Urban Information Lab</b> Graduate Research Assistant   Supervisor: Junfeng Jiao	UT Austin Jan 2025–Current
<ul style="list-style-type: none"><li>– GAUGE: Detecting Implicit Harmfulness During Conversation</li><li>– Conducted a research to measure the risk level of a conversation by observing changes in the internal probability of a predefined lexicon.</li><li>– SafeMate: Emergency Response and Preparedness Assistant Chatbot</li><li>– Collaborated with the City of Austin, designed the pipeline for a chatbot and developed a website to assist with preparing for and responding to crisis situations.</li><li>– Web-SUMO: Traffic Information Digital Twin</li><li>– Designed a program that collect traffic data for regional information, apply it to a simulation environment, and provide road modifications and optimal system design using reinforcement learning.</li></ul>	
<b>Human Language Technology Research Institute</b> Undergraduate Research Assistant   Supervisor: Vincent Ng	UT Dallas Dec 2023–Jan 2025
<ul style="list-style-type: none"><li>– MemeInterpret: Towards an All-in-One Dataset for Meme Understanding</li><li>– Created a meme corpus containing meme captions together with corresponding surface messages and relevant background knowledge. Strategically built upon the Facebook Hateful Memes dataset.</li></ul>	

## INDUSTRY EXPERIENCE

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<b>Turing</b> LLM Trainer	Palo Alto, CA (Remote) Sep 2025–Dec 2025
<ul style="list-style-type: none"><li>– Sequential Tool Usage Inducted Dataset Generation and Validation</li><li>– Using Frontier LLM, we sequentially employed both our own internal database tools and external tools to minimize hallucinations and higher success rate by generate a dataset capable of executing complex user instructions through efficient tool utilization, and performed verification procedures on it.</li></ul>	

## PUBLICATIONS (PEER-REVIEWED)

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1. S. H. Lewis, J. Jiao, Y. Xu, **Jihyung Park**, and C. Phillips, “A Decentralized Digital Twin via Crowdsourced Sensing and Browser-Based Edge Computation”, in *AAAI, The Second Workshop on AI for Urban Planning (AI4UP)* 2026.
2. Y. Xu, **Jihyung Park**, and J. Jiao, “LLM-Powered Digital Twins for Interactive Urban Mobility Simulation: Integrating SUMO with AI Agents”, in *NeurIPS workshop, UrbanAI: Harnessing Artificial Intelligence for Smart Cities (Urbanai)* 2025.

3. J. Park, K. P. N. Nguyen, **Jihyung Park**, M. Kim, J. Lee, J. W. Choi, K. Ganta, P. A. Kasu, R. Sarakinti, S. Vippera, S. Sathanapalli, N. Vaghani, and V. Ng, “MemeInterpret: Towards an All-in-one Dataset for Meme Understanding”, in *Findings of the Association for Computational Linguistics (EMNLP)* 2025.

## PUBLICATIONS (OTHER)

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1. J. Jiao\*, **Jihyung Park\***, Y. Xu, K. Sussman, and L. Atkinson, “Safemate: A Modular Rag-based Agent for Context-aware Emergency Guidance”, Preprint in arxiv 2025.
2. **Jihyung Park**, S. Afroogh, and J. Jiao, “Do You Feel Comfortable? Detecting Hidden Conversational Escalation in AI Chatbots for Children”, Manuscript in Preparation. Target Venue: ACL 2026 (ARR Jan).
3. **Jihyung Park\*** and M. Huang\*, “Bk-link: Background Knowledge as a Driver of Implicit Meaning Inference”, Manuscript in Preparation. Target Venue: ACL 2026 (ARR Jan).
4. **Jihyung Park**, “Mirror-Shot: Factual Consistency Evaluation via Dynamic Context Mirroring”, Manuscript in Preparation. Target Venue: ACL 2026 (ARR Jan).

## SKILLS

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- **Programming:** Python, Shell, JavaScript, R
- **Libraries/Frameworks:** PyTorch, LangChain, React, FastAPI,
- **Other:** SQL (PostgreSQL, MySQL),  $\LaTeX$ , MS Office, MATLAB, Docker, Git, Firebase

## PROJECTS

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LLM in Data Pre-processing (UT Austin, Database System, 2024)

- Researched on determine whether utilizing structured output via a 1-bit LLM enables more effective handling of outliers, missing rows, typos, and other issues during data pre-processing for structured datasets.

Code Switch ASR (UT Austin, Spoken Language Technology, 2024)

- Conducted an experiment to enhance the accuracy of speech recognition when two or more languages coexist simultaneously.

Ready2Interview (Hacktx, 2024)

- During hackathon, Integrated RAG for user PDFs (Resume, CV, etc) with internet search RAG functionality to create a system for user interview practice and real-time feedback via an ASR model and LLM pipeline

Motion Feedback Exercise Assistant (UT Dallas, Software Engineering, 2024)

- Developed a program that assists in analyzing and organizing the user’s exercise history and posture by analyzing body angles and movements through camera detection of each body part via the MediaPipe framework.

Youtube Trending Prediction (UT Dallas, Undergraduate Research, 2023)

- Designed a model that embeds thumbnail data via a variational autoencoder and trains a BERT model alongside other metadata to predict whether a specific video might be classified as trending.

## SCHOLARSHIPS AND AWARDS

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| • AKPC Scholarship                                   | 2024      |
| • UT Dallas Dean’s List                              | 2021–2024 |
| • Newsong Church Scholarship for Academic Excellence | 2021      |