ILLINOIS TECH

Fully-Funded Ph.D. Positions
Spring/Fall 2026 @ Computer Science Department, Illinois Tech

About the Advisor

Yue Dai

I am a tenure-track Assistant Professor in the Department of Computer Science at Illinois Institute of Technology (Illinois Tech). Before join Illinois Tech, I received my Ph.D. in Computer Science from the University of Pittsburgh in 2025.

My research focuses on **efficient and trustworthy machine learning systems**, with an emphasis on efficient deep graph learning and scalable LLM serving. My work has been published in top-tier conferences in systems, architecture, and machine learning areas, such as ISCA, ASPLOS, HPCA, ICML, and ICLR, etc.

Research Areas

➤ **Efficient Dynamic Graph Learning:** Dynamic graphs are prevalent in real-world applications such as social networks, recommendation, and agent-based systems. We develop **efficient and scalable frameworks for dynamic and temporal graph neural networks (TGNNs)** to enable efficient deep graph learning on large-scale, real-time dynamic graphs.

➤ **Efficient System for LLM + Graph:** Large language models can be enhanced with structured knowledge from graphs, but this requires efficient integration. We build **low-latency and scalable infrastructures** for LLM+Graph applications such as GraphRAG and graph-based AI agents, enabling complex reasoning and retrieval over massive graph-augmented systems.

➤ **Adversarial Robustness in Dynamic Graphs:** Ensuring robustness is critical for deploying graph neural networks in real-world, dynamic environments. We investigate **security challenges in deep graph learning**, develop **novel adversarial attacks** to reveal vulnerabilities, and design **defense strategies** that strengthen the resilience of dynamic graph models.

About Illinois Tech

Illinois Institute of Technology (Illinois Tech) is a private research university in **Chicago, the third-largest U.S. city and a major hub for technology and innovation**. Its **Computer Science graduate program is ranked among the Top 100 in the U.S. (CS Ranking & U.S. News)**, and the university is consistently recognized globally in *QS* and *THE* rankings. With strengths in **engineering, computing, and applied sciences**, and its **prime location in Chicago**, IIT offers excellent opportunities for research, internships, and career development.

Illinois Tech Campus View

Department of Computer Science @ Illinois Tech
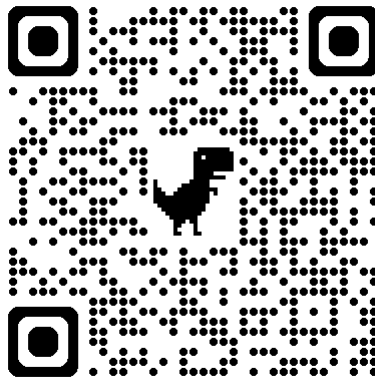
Who We Are Looking For

- Bachelor's or Master's in CS/CE/EE or related fields, with foundations in **ML or computer systems**.
- Proficiency in **Python, C/C++**, and preferably experiences in CUDA Programming and PyTorch.
- Prior research/project experience in **ML systems, graph learning, or related areas** is a plus.
- Strong motivation for research, curiosity, and commitment to a long-term Ph.D. journey.

How to Apply

Send the following **ydai21@illinoistech.edu**:

- CV or resume
- Academic transcripts (unofficial is okay)
- Brief statement of research interest (informal is okay)

Email subject: Fall 2026 Application – Your Name – University

Scan the code (link: https://yud42.github.io/) to learn more about me and my ongoing research.

Join us to advance efficient and trustworthy AI through full-stack solutions across algorithms, systems, and architectures!