

TINGXI LI

Linggong-Road 2, Dalian City, China, 116024

📞 (+86)15807660063 ✉ tinzzzy.li@gmail.com [in linkedin](#) [🌐 homepage](#)

Education

Dalian University of Technology

Bachelor of Science: Chemistry

Sep. 2019 – May 2024

Dalian, China

Technical University of Munich

Visiting Student: Computer Science

Apr. 2022 – Oct. 2022

Munich, Germany

Relevant Coursework

- Data Structures
- Linear Algebra
- C Programming
- Database
- Mathematics Foundations for AI and Machine Learning
- Computational Chemistry

Academic Experience

Patch-wise One-pixel Attack on Vision Transformers

Sept. 2021 – Dec. 2021

College Students Innovation Training Project

Dalian, China

- Conducted a survey towards the robustness of Vision Transformers when exposed to patch-wise natural corruption and malicious attacks.
- Designed and implemented a one-pixel attack algorithm that attacks on each patch of the image individually. Test the algorithm on both ViTs and CNNs.

Adversarial Attack on a Robotic Arm

Jan. 2023 – Present

UT Dallas | Supervisor: Wei Yang

Dallas, United States

- Revamped non-differentiable operations within the original robotic arm system, introducing a differentiable neural network renderer in place of the existing camera.
- Ensured consistent system performance with the baseline through rigorous training, treating the integrated system as a unified Multilayer Perceptron. Employed adversarial attack algorithms, generated adversarial examples targeting object pose and shape.
- Conducted experiments focused on single-object grasping tasks, revealing a significant decrease in grasping success rates for most objects following adversarial attacks.

LLM Based Yield Prediction of C-N Crosscoupling Reactions

Oct. 2023 – Present

Dalian University of Technology | Supervisor: Yang Li

Dalian, China

- Compare the performance in yield prediction of Large Language Models(LLM).
- Introduce a module to generate SMILES(Simplified molecular-input line-entry system) prompts.
- Fine-tune pre-trained models with prompt on HTE datasets and test out-of-sample data.

Industrial Experience

Shenzhen TenClass Technology Co. Ltd

Jan. 2022 – Apr. 2022

Product Manager Intern

Shenzhen, China

- Conducted market research to understand the requirements for an AI character used in live streaming, analyzing recent academic papers and established commercial solutions.
- Designed and implemented a virtual host for live streaming using a combination of text-to-speech and speech-to-video models. Capable of responding real-time comments.

Awards and Foundation

Research Foundation for Outstanding Undergraduate

Oct. 2023 – Oct. 2025

Project Member

Dalian, China

- 3,000 USD granted by Dalian University of Technology.
- Project title: LLM Based Yield Prediction of C-N Crosscoupling Reactions.

Miscellaneous

Research Interest: Trustworthy AI; Software Engineering; AI for Science

Tech Stack: Python; C; C++; Java; PyTorch; LaTeX; SQL

Languages: English / Mandarin / Cantonese / German