Kangrui Chen

EDUCATION

Southern University of Science and Technology, China

09/2021 - Present

Undergraduate Computer Science and Technology (Honored Turing Class)

Current GPA: 3.76/4.0

Michigan State University, US

04/2024 - 08/2024

Intern Student Supervised by Jiliang Tang, Data Science and Engineering Lab

RELEVANT QUALIFICATION

Key Courses: Calculus, Linear Algebra, Introduction to Artificial Intelligence, Probability and Statistics, Data Structures and Algorithm Analysis, Discrete Mathematics, Algorithm Design and Analysis, Artificial Intelligence, Machine Learning, Deep Learning

Honors:

2024 The Third Class of the Merit Student Scholarship

2023 The Third Class of the Merit Student Scholarship

2023 Outstanding Student Teaching Assistant

2023 Outstanding Senior Monitor

2022 The Third Class of the Merit Student Scholarship

2021 Admission Scholarship

Publication

1. Jie Ren*, **Kangrui Chen***, Yingqian Cui, Shenglai Zeng, Hui Liu, Yue Xing, Jiliang Tang, Lingjuan Lyu Six-CD: Benchmarking Concept Removals for Benign Text-to-image Diffusion Models

CVPR 2025

2. Jie Ren, **Kangrui Chen**, Chen Chen, Vikash Sehwag, Yue Xing, Jiliang Tang, Lingjuan Lyu Self-Comparison for Dataset-Level Membership Inference in Large (Vision-)Language Model

WWW 2025 (Oral)

RESEARCH EXPERIENCE

Self-Comparison for Dataset-Level MIA

08/2024 - 10/2024

- Proposed a dataset-level membership Inference Self-Comparison Membership Inference (SMI), which can be widely apply to (vision-)language model.
- Leveraging the memorization sensitivity of DNN, the proposed method outperformed traditional MIA and dataset inference techniques when no prior knowledge of ground-truth member data is available.

Six-CD 04/2024 - 08/2024

- Proposed a comprehensive dataset for benchmarking concept removal on text-to-image diffusion models.
- Proposed a novel metric named "in-prompt retainability", which measures model's ability to express the rest concepts when removals are triggered.

Improved Co-Tracker

10/2023 - 01/2024

- Introduced a trick used by PIPs++ to improved long-term pixel-level point tracking ability.
- Proposed using optical flow as auxiliary guidance for co-track points selection.

Evox

07/2023 - 08/2023

- A distributed GPU-accelerated framework for scalable evolutionary computation.
- Contributed to the implementation of multi-objective optimization algorithms.

Course Projects:

AI Chat Bot Platform with Java, Python, and Hugging Face

Traffic Sign Recognizer with YOLOv8

Simplified Compiler on C99

HTTP Server on Python

CARP Solver using genetic algorithm

Reversi Player based on min-max search

Simple File System on Linux

Simplified Matrix Library on C++

Chess Game with GUI on Java

OTHER EXPERIENCE

Teaching Assistant

Assisted teaching in CS111 (Introduction to C Programming) and CS205 (C/C++ Program Design) by answering questions as well as designing quizzes, assignments, projects, and exams.

Student Development Center of Zhixin College

Served as Senior Monitor, helping freshmen accommodate to campus life and study.

Astro Rave Club

Have been participating in performances and sharing relevant skills as the Head of Production and Performance Section.

Zhixin College Soccer Team

Played school-level and college-level games in represent of Zhixin College and CS department respectively.

Social Practice Volunteer

Volunteered in college events, environmental protection activities, half marathon competition, COVID-19 nucleic acid testing and blood donating.

STANDARDIZED TEST

TOEFL iBT: 103 (R29, L30, S22, W22)

TOEFL *MyBest* Scores: 104 (R29, L30, S23, W22)

SKILLS & INTERESTS

Languages: Chinese(native), English(fluent)

Programming: Python, C/C++, Java, Matlab, Markdown, LATEX, HTML

Utilities: GitHub, Hugging Face, VS Code, JetBrains, JAX

Interests: (Electronic) Music (Production & DJing), RPG, Sports,