Junsheng Huang

(+86)13798300044

☑ jh103@illinois.edu **☑** junsheng.21@intl.zju.edu.cn

github.com/no-touch-fish

Education

ZheJiang University-University of Illinois at Urbana-Champaign

Expected June 2025

Dual Bachelor of Electrical and Computer Engineering (UIUC GPA: 4.00 / 4.00) (ZJU GPA: 3.98 / 4.00)

• Relevant Courses and Grades: Computer System Engineering(ECE391)-A, Data Structure(CS225)-A+, Linear Algebra(MATH257)-A+, Probability with Engineering Applications(ECE313)-A+, Artificial Intelligence(CS440)-A+, Algorithm(CS374)-A+, Machine Learning(CS446)-A+

Research Experience

Galaxy Federated Learning Framework

Instructor: Chao Wu (ZJU Professor)

June 2022 - August 2022

- This project explores a possible method to obtain training data for machine learning from clients with privacy protections
- I help adding functions for monitoring the status of CPU and GPU while running the local program
- I help debugging the data transporting process to let the model being delivered and trained

LLM Attack Based on Gradient Method

Instructor: Gagandeep Sigh(UIUC Professor), Jason Vega(UIUC Ph.D)

Feb 2024 - Jun 2024

- This project hope to find a more efficient and stronger way to attack Llama2
- Motivation: Noticing that if we can decide the first line of LLM generation (which is "priming" attack), we can easily bypass the safety training. So, what if we can ignore the "ending token" that separates the input and output?
- **Contribution:** I modify the code based on **GCG** (including data, loss function and part of the code structure) to run this "priming" attack and have a better performance.
- Achievement: With GCG, I find "ignore" string and attack Llama2-7B and Llama2-13B with successful rate 97%.

Course Projects

391 OS System

Sep 2023 - Dec 2023

- Basic Functionalities: Implemented an operating system supporting basic functionalities like scheduling, interrupts, system calls, exceptions, and file systems
- **Self-designed features**: ATA drivers to support writable file system, command history, changeable color and auto complete

Technical Skills

Programming: C, C++, Python, MATLAB, x86 assembly, Unreal Engine 5, Pytorch frame **Spoken Languages**: English(Professional), Mandarin(Native), Cantonese(Native)

Honors

- Honorable Mention of Mathematical Contest of Modeling (May 2023)
- ZJU-UIUC Institute Third-Class Academic Excellence Award for Semaphore Year
- UIUC Grainger Engineering Department Dean's List for two semesters in Junior Year

Teaching and Leadership

Course Assistant for ECE391(Computer System Engineering)

Jan 2024 - May 2024