Jingtian Wu

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Education

Cornell University **Ithaca, NY**

B.A. in Computer Science — GPA: 3.932/4.000 *Fall 2022–Spring 2026*

Research Interests: Multimodality, Natural Language Processing, Reinforcement Learning, Machine Learning

Relevant Coursework: NLP, RL, ML, Computer Vision, Algorithm, AI Foundations, AI Philosophy, OOP & Data Structures, Functional Programming, Linear Algebra, Discrete Math, Calculus, Computer Systems

Research

Self-Evolving LLM via Automated High-Quality Dataset Curation

Independent Researcher advised by Claire Cardie *Spring 2025–Present*

- Developing a framework for LLMs to dynamically curate high-quality datasets for self-fine-tuning.

Culturally and Temporally Contextualized Lyric Generation

Researcher advised by Matthew Wilkens *Spring 2025–Present*

- Developing a lyric generation system that adapts to cultural and temporal contexts.

Automatic Code Generation System

Independent Researcher advised by Prof. Claire Cardie and Wenting Zhao *Fall 2024*

- Developed an automated code generation system using Aider on the "Commit-0" benchmark and explored multi-agent collaboration, rollback mechanisms, curriculum learning, and tree search–based planning to improve its performance.

Reasoning Court (RC) Framework for Enhancing Accuracy in Multi-Hop Question Datasets

BURE Researcher advised by Prof. Claire Cardie and Wenting Zhao *Summer 2024–Present*

- Developed a framework that improves LLM performance on multi-hop reasoning and fact-verification benchmarks, achieving an average absolute improvement of 5 percentage points over previous best-performing few-shot prompting baselines.

Computer Music Synthesis and Composition

Researcher advised by Prof. Roger B. Dannenberg *Summer 2023*

- Researched algorithmic composition, digital audio theory, sound synthesis algorithms, and Nyquist computations.

Algorithms for Big Data

Researcher advised by Prof. David Woodruff *Summer 2021*

- Designed and implemented a lightweight GAN (LWAnimeGAN) that reduces model parameters and computational cost, ensuring faster processing and lower memory usage, making it suitable for smartphone applications.

Projects

REVIEWER2: A Two-Stage LLM Framework for Academic Peer Review Generation

Collaboration with Prof. Thorsten Joachims and PhD student Zhaolin Gao

- Main lead in developing a demo system for REVIEWER2, a two-stage LLM framework for academic peer review generation.

Activities

BOOM (BITS ON OUR MINDS) 2024

- Presented "REVIEWER2" project to Cornell community and industry and featured in the **Cornell Chronicle**.

Teaching Experience

TA for CS 3700: Foundations of AI Reasoning and Decision-Making, Cornell CIS, Fall 2024

Publications

2023: **Jingtian Wu**, "Algorithmic Composition of Music Utilizing the Digits of Pi," Computer Science and Intelligent Communication (CSIC 2023)

2021: Xuan Zhao*, Yuxin Zhou, **Jingtian Wu**, Qinjia Xu, Yunpeng Zhang, "Turn Real People into Anime Cartoonization," ICCECE 2021

Skills

Programming: Python, JavaScript, Java, OCaml, LaTeX **Web Development:** HTML/CSS, Node.js, Flask, FastAPI, React **Frameworks/Libraries:** PyTorch, React **Tools:** Visual Studio Code, Jupyter, GitHub