Qihui Yang

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Education

University of California San Diego, MS in ECE, GPA: 4.0/4.0 — Sep 2024 – Jan 2026
- **Coursework:** Natural Language Processing, Web Mining & Recommender System, Python Programming

Sun Yat-Sen University, BS in Statistics, GPA: 3.8/4.0 — Sep 2020 – June 2024
- **Coursework:** Data Structure & Algorithm, Statistical Computation, Stochastic Process, Statistical Learning

Internships

AI Algorithm Intern, Tencent Music entertainment Group – Guangzhou, China — June 2024 – Sep 2024
- Helped accelerating the "Lingyin Engine" for singing voice conversion via distillating diffusion models;
- Implemented Large-scale Contrastive Language-Audio Pretraining (LAION-CLAP) to help develop a universal music tagging system;
- Pre-processed large-scale music datasets.

Research Assistant, The Chinese University of Hong Kong – Hong Kong SAR — Dec 2023 – May 2024
- Advisor: Qiuqiang Kong
- Worked on diffusion models for MIDI-to-Audio Tasks and developed the One-shot Text-aligned Virtual Instrument Generatio Model

Research Assistant, Dartmouth College – Remote — Sep 2023 – July 2024
- Advisor: Yujun Yan
- Implemented and trained Heterogeneous Graph Neural Networks with novel ideas;
- Derived theoretical guarantees for Graph Neural Network models.

Publications

One-shot Text-aligned Virtual Instrument Generation Utilizing Diffusion Transformer — Oct 2024
Qihui Yang, Jiahe Lei, Qiuqiang Kong
NeurIPS 2024 Workshop on AI-Driven Speech, Music, and Sound Generation

Exploring Consistency in Graph Representations: from Graph Kernels to Graph Neural Networks — Sep 2024
Xuyuan Liu, *Qihui Yang*, Yinghao Cai, Yujun Yan
NeurIPS 2024 https://arxiv.org/abs/2410.23748

Enhancing Size Generalization in Graph Neural Networks through Disentangled Representation Learning — Jul 2024
Zheng Huang, *Qihui Yang*, Dawei Zhou, Yujun Yan
ICML 2024 https://arxiv.org/abs/2406.04601

Invited Talk

A Unified Perspective From Statistical Inference to Generative Modeling — Jan 2025
Synced (jiqizhixin)

Competitions & Awards

Honorable Mention, **2023 Interdisciplinary Contest in Modeling (ICM)** — May 2023
Special Scholarship Award for Academic Innovation (Top 1%), **Sun Yat-Sen University** — Dec 2022
Finalizer of Singing Competition, **Sun Yat-Sen University** — Dec 2023
Winner of Singing Competition, **Chinese Global Community@UC San Diego** — Feb, 2025

Technologies

Linux, C++, Python (pytorch), R, SQL

Extracurricular Activities

Singing Course Promotion@Singlive - Singer   Jul 2019

- Completed a rigorous two-year professional training program in contemporary vocal performance, specializing in pop singing techniques and stage presence;
- Represented the training academy as a top-performing trainee in promotional campaigns, enhancing brand visibility and attracting prospective students through performances and outreach initiatives.

Original Music Club@Sun Yat-Sen University - Lead Singer   Sep 2020 - Sep 2022

- Songwriting, Music production and Performing with bands;
- Uploaded written songs to music streaming platforms.

Theme Song Production & Performance - *GG Bond: Interstellar Action* (Movie Link)   Feb 2024

- Performed lead vocals for the official theme song;
- Collaborated in the production cycle including lyric adaptation, vocal arrangement.