Lejun Min

Researcher, Artist

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LinkedIn
GitHub

About me

Master's student at Stanford CCRMA specializing in music generation, audio signal processing, and human-computer interaction. Published at top venues including ICLR (Spotlight) and ISMIR.

Intermedia & sonic artist with various performances and installations. Passionate about bridging AI and creative expression through innovative music technologies.

Technical Skills

Research Areas

Music Generation
Music Information Retrieval
Representation Learning
Multimodal Learning
Digital Signal Processing
Human-Computer Interaction

Programming

Python C++ C Java Rust
Verilog Lua Arduino WGSL
Bash

Machine Learning

PyTorch TensorFlow Accelerate
Lightning

Audio & Graphics

JUCE ChucK Reaper Pure Data
Blender Adobe Premiere

Development

Arch Linux Neovim Git Docker

Languages

Mandarin Chinese
English (TOEFL 112)
French

Education

Stanford University, CCRMA 2024 – Present

M.A. in Music, Science, and Technology (GPA 4.0/4.0)

- Advisors: Prof. Marina Bosi, Prof. Takako Fujioka
- CCRMA Flagship Project Award, Chiang Chen Overseas Graduate Fellowship

Shanghai Jiao Tong University, Zhiyuan College 2019 – 2023

B.Eng. in Computer Science (Fellowship)

- Member of **ACM Honor Class** – elite CS program for top 5% students
- Top 1% Outstanding Bachelor's Thesis (41 out of 3873 graduates)

Experience

Smule Labs – Research Intern *Oct. 2025 – Present*

- Building music-text joint embedding addressing modality gap of contrastive learning.
- Supervisor: Yongyi Zang

Sony CSL Paris – Research Intern *June 2025 – Sept. 2025*

- Designed end-to-end mixing/mastering system using audio representation learning – pioneering study on automatic mixing with fully generative approach.
- Supervisor: Dr. Stefan Lattner

SoundPatrol & Stanford – Research Assistant *Feb. 2025 – May 2025*

- Trained singer representation model for deepfake detection – reduced EER by 10%, achieved 96% top-1 accuracy on SingFake dataset.
- Advisor: Prof. John Thickstun, Prof. Walter De Brouwer

Music X Lab, MBZUAI – Research Assistant *June 2022 – Dec. 2022, Sept. 2023 – Feb. 2024*

- Led development of hierarchical symbolic music generation (ICLR 2024) and polyphonic generation with diffusion models (ISMIR 2023).
- Advisor: Prof. Gus Xia

Publications

Leveraging Rotational M/S Coding and ML in Stereo Audio Coding *IWSSPA 2025*

L. Min, S. Chen, M. Bosi

MuPT: A Generative Symbolic Music Pretrained Transformer *ICLR 2025*

X. Qu, Y. Bai, ... L. Min, et al. [OpenReview] [Demo]

Whole-song Hierarchical Generation Using Cascaded Diffusion Models *ICLR 2024 (Spotlight)*

Z. Wang, L. Min, G. Xia [OpenReview] [Demo]

Polyffusion: A Diffusion Model for Polyphonic Score Generation *ISMIR 2023*

L. Min, J. Jiang, G. Xia, J. Zhao [Poster] [Demo]

Selected Projects

Programming

- Scotty3D: Software rasterization, mesh editing, path tracing, animation (C++)
- Ray Tracer: Complete ray tracing engine in Rust
- RISC-V CPU: 5-pipelined RISCV32I with FPGA implementation (Verilog)
- Mx Compiler: Hand-made compiler surpassing -O1 optimization (Java)

Art & Music

- A Chan Conversation: Ambisonics performance with Gametrak
- Umbrella: Intermedia piece for Ambisonics audio & video exploring self and fear
- Sonic Skateboard: Arduino + ChucK musical instrument
- Kandinsky Sonified: Interactive audiovisual music sequencer creating Kandinsky-like abstract paintings
- 晚海 (Sunset Sea): Electronic music published under CEM Records