Terry Feng

Software Engineer with deep expertise in real-time audio processing and musical creativity

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Portfolio: https://fenglyfe.com

Education

Stanford University (Sept. 2022 – June 2024)
M.A. in Music Science Technology (3.97 GPA)
Center for Computer Research in Music and Acoustics (CCRMA)

- Building co-creative tools for music HCI and performance

University of California, San Diego (Sept. 2018 – June 2022)
B.S. Computer Science – Jacob's School of Engineering
B.A. in Music – Piano Performance (3.88 GPA – Cum Laude)

Experience

CCRMA, Stanford University (Jan. 2023 – Present)
Research Engineer, Section Lead

- Created WebChucK IDE, a full-fledged online IDE for audio programming and interactive DSP, taught in Music 220A: Fundamentals of Computer-Generated Sound
- Contributed to the ChucK programming language written in C++, developed core language features for the community, and managed WebAssembly/WebGPU toolchains

Zwift, Long Beach, CA (June 2021 – Sept. 2021)
Software Engineer Intern

- Designed and delivered high-performance microservice using Quarkus and Kafka, scaling to serve 50,000 concurrent players
- Implemented C++ client network requests and built API endpoints with JDBC to PostgreSQL, enabling customer service to clear a 6-month backlog of 150k tickets

Skills

JavaScript, TypeScript, Node.js

WebAssembly/Emscripten

React, React Native

C/C++, Python, Java

Digital Signal Processing (DSP)

Software Design/Architecture

Interactive Machine Learning

UI/UX Design (Figma, Adobe)

Music Production (Ableton Live)

Activities

Web Audio Research & Experiment Group @ CCRMA
(Sept. 2023 – Present)

ChucK Research & Development @ CCRMA – Web Lead
(Sept. 2022 – Present)

Acts 2 Christian Fellowship @ Stanford – President
(Sept. 2023 – Present)

Stanford New Music Ensemble
(Sept. 2022 – Present)

Independent Artist & Producer
(Oct. 2020 – Present)

Symphonic Student Association @ UCSD – Vice President
(June 2021 – June 2022)

Projects

SoundscapeAI, Stanford University (Jan. 2023 – Mar. 2023)

- Implemented real-time audio feature similarity retrieval using KNN to generate soundscapes through concatenative synthesis; available online here

Terryng Automata, Stanford University (Nov. 2022 – Dec. 2022)

- Created a co-creative beat sequencer in Unity by combining algorithms for Turing Machine Eurorack with Elementary Cellular Automata; download here