# **Terry Feng**

Music Software Engineer

3.97 Cumulative GPA

**Education** 

tzfeng@stanford.edu https://fenglyfe.com

## Skills

C/C++, Python, Java

Web Development (JS/TS/Node.js)

Digital Signal Processing (DSP)

Systems and Architecture

Interactive Machine Learning

UI/UX (Figma, Adobe)

Music Production (Ableton Live)

Music Composition & Performance

## University of California, San Diego (Sept. 2018 – June 2022)

Center for Computer Research in Music and Acoustics (CCRMA)

B.S. Computer Science - Jacob's School of Engineering

**B.A.** in Music – Piano Performance

M.A. in Music Science Technology

3.88 Cumulative GPA – Cum Laude

#### **Experience**

**CCRMA, Stanford University** (Jan. 2023 – Present)

Stanford University (Sept. 2022 – June 2024)

Researcher, Developer, Section Lead

- Created WebChucK IDE, an online IDE for audio programming in ChucK, taught in MUS 220a, presented at NIME & SMC 2023
- Worked on Chuck programming language development (C++), introduced WASM and WebGPU implementations for browser audio synthesis and integrated graphics
- Researched co-creative notions and applications involving machine listening using Somax2, embedded DSP with Teensy, and built HCI software tools, installations, and concerts

**Zwift, Long Beach, CA** (June 2021 – Sept. 2021)

Software Engineer Intern

- Designed and delivered high-performance microservice using Quarkus and Kafka to serve 50,000 concurrent players
- Implemented C++ client network requests and API endpoints communicating with JDBC and PostgreSQL

#### **Activities**

Web Audio Research & Experiment Group (WARE) @ CCRMA

(Sept. 2023 – Present)

Chuck Research & Development @ CCRMA

(Sept. 2022 – Present)

Stanford New Music Ensemble (Sept. 2022 – Present)

USB3 – Computer Music Band (Mar. 2023 – Oct. 2023)

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

La Jolla Symphony & Chorus – Violinist

(Sept. 2018 – June 2019)

### **Projects**

**SoundscapeAl, Stanford University** (Jan. 2023 – Mar. 2023)

- Implemented real-time audio feature similarity retrieval using KNN to generate soundscapes through concatenative synthesis; deployed on the web

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

- Created an audiovisual beat sequencer in Unity by redesigning a Turing Machine Eurorack with Elementary Cellular Automata