Daphne Wilkerson

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Summary

I am a highly self-motivated UI/UX designer and developer excited to find work in audio technology. I thrive best among teams that are similarly eager to craft meaningful and reliable music-making experiences.

Education

Stanford University   Stanford, CA
BS in Computer Science (Concentration in Human Computer Interaction), Minor in Music   June 2023
GPA: 3.99

   Coursework focus: team-based software development, group critique, design principles, music technology, technical writing, algorithm design, and usability testing

Coronado High School   Coronado, CA
Valedictorian — GPA: 4.46   June 2018
Distinction in Science, Yale Book Award, National Honor Society
Coronado School of the Arts, Piano Performance

Experience

Independent Music Software Development   June 2023 – Present

   Released *LaunchCodes*, an audio production plugin for synthesizing explosive sounds, built and tested over a five month period

   Leveraged the Juce framework to build an industry-standard product with original code

   Designed an entirely unique and themed user interface with over 20 original GUI components and several modes of user interaction, prototyped in Figma

   Integrated Faust audio processing language for novel DSP algorithms, and built custom envelope, LFO modulator, and synthesizer voice classes from scratch in C++

   Profiled performance in several environments throughout production and dramatically optimized runtime

   Designed a highly interactive website from scratch to host my work, accessible here

Research in Interaction Design   January 2022 – June 2023

   Conducted research on touch gestures for audio-based interaction over several months with three co-researchers, involving ten participants and producing a paper on our findings (unpublished, available here)

   Oversaw design work of four high-fidelity mobile and web app prototypes in teams of four developers using React Native and Figma, in domains such as music education, music-sharing, and artificial intelligence

   Won best overall app prototype in a design contest of over 50 group competitors

Stanford Taiko – Artistic Director   September 2021 – June 2022

   Oversaw twice-weekly rehearsals for nationally respected Japanese drumming ensemble of 15 members

   Managed minute-by-minute practice scheduling, communication with distinguished guest teachers and advisors, and preparation for 25th anniversary concert attended by over 600 people and featuring dozens of guest performers

   Updated and maintained organization website with university domain access

Skills

Programming & Design: C++, C, JavaScript, HTML/CSS, Python, Git, Illustrator, Figma

Music Experience

   Music production (Ableton, Logic), studio recording
   Composition: premiered string quartet, percussion trio, and won statewide contest with original work for piano
   DSP algorithm design (ChucK, Faust, Max, Web Audio, C++) and music visualization (Processing, C++)
   Keyboard, guitar, ensemble drumming

Language Proficiency in French, German, and Japanese

Hobbies include fashion history, horror films, and gaming