

Senior Software Engineer specializing in real-time audio DSP and C++ systems. Technical lead with experience shipping industry-recognized plugins and translating research prototypes into production code.

WORK EXPERIENCE

Adobe, Inc — Adobe Podcast

Senior Software Engineer, Web Audio Products & Services

Remote to NYC, NY

July 2024 – July 2026

- Collaborated with Adobe Research to implement background and music sliders in Enhance Speech
- Led end-to-end integration of Speechmatics transcription, designed for swapping with future services
- Built a robust error reporting structure for third-party transcription services with a live dashboard

iZotope (Native Instruments)

Senior Software Engineer & Tech Lead

Boston, MA

Sep 2021 – July 2024

- Served as Technical Lead for a team of 7 engineers building and releasing iZotope Ozone
 - Project Lead for Ozone 11, winner of Sound on Sound's 2023 Best Plugin award
 - Defined technical strategy, task breakdowns, and stakeholder communication across the full release cycle
 - Mentored 2 engineers from junior contributors to fully independent
 - Tracked team health and velocity via biweekly metrics
 - Scoped technical investment estimates and partnered with product management to ship multiple large projects on time
- Contributed to production codebases for audio and real-time DSP applications in modern, optimized C++
 - Rebuilt Ozone Master Assistant to use a targeted approach to match the user's desired sound
 - Developed intuitive UIs using a C++ flexbox layout system and React
 - Drove feature iteration through frequent beta feedback cycles

Software Engineer

June 2019 – Sep 2021

- Designed and implemented the "Complex Ambience Match" algorithm in iZotope RX 9 Audio Editor
- Ported Exponential Audio reverb algorithms into the iZotope ecosystem, released in Dialogue Match and Neoverb
- Collaborated with the Research team to build a real-time C++ prototyping tool for wave digital filters
- Organized a biweekly DSP paper review group to promote team learning and technical depth

Goodhertz, Inc

Audio DSP Software Engineer

Los Angeles, CA

Jan 2017 – Mar 2019

- Prototyped DSP algorithms and modeled existing audio effects in MATLAB
- Implemented, tested, and optimized DSP algorithms in C++ for improved performance and clarity

EDUCATION

University of Michigan · Ann Arbor, MI

May 2017

BSE, Computer Science Engineering — College of Engineering

Minor, Electrical Engineering — College of Engineering

BS, Audio Engineering — School of Music, Theatre & Dance

SKILLS

Languages & Frameworks: C++, Python, C, TypeScript, Ruby on Rails, React

Audio & DSP: Real-Time Audio Processing, Digital Signal Processing Algorithms, Intel IPP, vDSP, xsimd

Tools & Practices: Git, Agile, New Relic, Claude Code, Audio Engineering, Prototyping, Test Driven Development

Leadership: Technical Lead, Mentorship, Roadmap Planning, Stakeholder Communication

PEER-REVIEWED PUBLICATIONS

2022 "Modeling and Extending the RCA Mark II Sound Effects Filter," K. J. Werner, E. J. Teboul, S. Cluett, & E. Azelborn, *Proc. of the Int. Conf. on Digital Audio Effects (DAFx20in22)*, Vienna

2023 "Antialiasing Piecewise Linear Waveshapers with Very Soft Corners," K. J. Werner & E. Azelborn, *Proc. of the Int. Conf. on Digital Audio Effects (DAFx2023)*, Copenhagen