Landon Viator

[Email](#) [GitHub](#) [LinkedIn](#) [Medium](#) [YouTube](#)

Passionate C++ developer with over five years experience building JUCE applications with beautiful UI implementations from design software like Figma. Also experienced in connecting to web services from JUCE apps.

EXPERIENCE

Viator DSP — *Audio Software Engineer Consultant*

May 2023 - PRESENT

- Utilized modern C++ to develop ten audio applications from concept to completion for Babelson Audio, ensuring high-performance and real-time requirements.
- Applied C++-based frameworks like JUCE to redesign the UI from Figma designs and add new features for Gatelab by Audiomodern, enhancing functionality and user experience.

Music Tribe — *Audio Software Engineer*

April 2022 - April 2023

- Led the design and development of a proprietary software framework using C++, ensuring modularity, scalability, and performance for real-time audio applications.
- Led the development and design of a central app built in C++ to host multiple software products, focusing on efficient architecture and seamless integration of components.

Viator DSP — *Audio Software Engineer Consultant*

May 2021 - April 2022

- Designed and implemented DSP algorithms for Cymatics across multiple products.

EDUCATION

- **Louisiana State University — *PhD***
  August 2017 - May 2020 Baton Rouge, LA

  Research: Chaotic systems and fractals, non-linear audio processing, genetic algorithms.
- **University of Louisiana — *Master of Music, Bachelor of Music***
  August 2011 - May 2017 Baton Rouge, LA

SKILLS

- **Programming Languages**: C++, Python, Bash, C#, Matlab, MaxMSP.
- **Tools and Frameworks**: CMake, CLion, Xcode, Visual Studio, JUC, QT, Boost.
- **DevOps**: Git, Github Actions (CI/CD), Jira, GoogleTest.
- **Systems**: Mac (ARM/Intel), Windows, Linux.

PUBLICATIONS & PRESENTATIONS

- **Sound Synthesis by Connecting a Chaotic Map to a Bank of Resonators**
  International Computer Music Conference · Jan 31, 2020, Co-authored with Edgar Berdahl

- **Finding Music in Chaos: Designing and Composing with Virtual Instruments Inspired by Chaotic Equations**
  PhD Dissertation March 2020, LSU Digital Commons

- **JUCE Audio Process Block Basics**
  Guest appearance on The Audio Programmer, 2022

- **Prototyping Distortion Effects In MaxMSP For JUCE**
  Guest appearance on The Audio Programmer, 2022

PROJECTS

- [Duplex Comp](#) - Serial audio compressor plugin for Mac and Windows.
- [PolettiClassBAmplifier](#) - Open-source DSP implementation of analog class-b amplifier.
- [ViatorJuceCMake](#) - Juce template with CMake, unit tests, and build pipeline examples.
- [VibeMechanicMkII](#) - Lofi-inspired multi-effects audio plugin for Mac and Windows.
- [CPP-Rust-Performance-Tester](#) - C++ project that tests and times the performance of C++ code against the same code in Rust.