

# Lucas Burkholder

(781) 999-3870 | [lucasburkholder27@gmail.com](mailto:lucasburkholder27@gmail.com) | <http://www.linkedin.com/in/lucas-burkholder>

## SUMMARY:

Engineer experienced designing audio software & hardware, seeking software development opportunities

## EDUCATION

**University of Miami, Coral Gables, FL**

May 2023, **GPA: 3.9 / 4.0**

**Bachelor of Science: Music Engineering Technology**

**Minor: Computer Engineering**

- **Honors:** President's Scholarship, Provost's Honor Roll and Dean's List
- **Relevant Coursework:** Audio Signal Processing, Audio Software Development I and II, Algorithms, Computer Architecture, Microprocessors: Hardware, Software, & Interfacing, Data Structures, Transducer Theory, Audio Electronics and Digital Logic Design
- **Technical Skills:** Proficient in: Audio Plugin Development (JUCE/C++), object-oriented programming (C/C++, Java, Python), digital signal processing, embedded programming (Arduino, Teensy, Daisy Seed), MATLAB, Git, Verilog HDL, ARM assembly programming, audio recording/mixing (Pro Tools), video editing with Adobe Premiere, and web design.

## WORK & LEADERSHIP EXPERIENCE

**Audio Software/Hardware Design Projects** (<https://lucasburkholder.github.io/projects.html>)

- Created a variety of audio processing devices and plugins using JUCE, RackAFX, and microcontrollers
- Wrote DSP objects in C++ to be used in multiple projects
- Examples: hybrid digital/analog synthesizer, physical model-based guitar synthesizer plugin, digital bass guitar effect pedal, stereo widener plugin, RISC CPU design in Verilog HDL
- Semi-Finalist for the 2023 Audio Engineering Society Student Design Competition

**Alert Innovation** (<https://www.alertinnovation.com/>)

**Andover, MA**

*Manufacturing Test Engineer Intern*

June 2022 - August 2022

- Improved documentation for configuration and provisioning of Product IT server
- Helped contract manufacturer to streamline receiving of IT products

**Mobius Mobility** (<https://mobiusmobility.com/>)

**Manchester, NH**

*Audio/Video Intern*

May 2021 - June 2022

- Work with video contractors, capturing footage to be used in iBOT® PMD user training videos
- Set up a training website using LearnDash, helping expand the iBOT training program nationwide

## Self-Employed

*Website Designer* (examples: [peggys-cottage.com](http://peggys-cottage.com), [nextlvlmusicgroup.com](http://nextlvlmusicgroup.com))

March 2019 - Present

- Designed responsive websites for businesses and individuals, helping their brand come to life
- Used HTML5, JavaScript, and CSS with the Bootstrap framework, implementing contact forms with PHP and SQL

**NextLVL Music**

**Lexington, MA**

*Owner*

June 2015 - Present

- Started successful DJ, Music Production, and Recording business with several repeat clients
- Hire and train DJs and Emcees to put on larger events and ensure they run smoothly
- Produced, recorded, and mixed a compilation album in collaboration with several artists

**University of Miami Recording Services**

**Coral Gables, FL**

*Lead Recording Engineer*

September 2019 - Present

- Work with clients to prepare and set up for concerts, ensuring smooth sound checks and shows
- Record and mix live recitals and concerts, helping musicians get their best possible sound
- Delegate setup and teardown responsibilities to assistants so that large shows happen efficiently

## ACTIVITIES & INTERESTS

**Activities:** Social Fraternity Alpha Sigma Phi, Music Production/DJ Club

**Interests:** Music Production, Game Programming, Electronic Circuit Design