812-240-1279 berthilldev@gmail.com www.berthilldev.com LinkedIn AngelList Github

<u>SKILLS</u> JavaScript, Ruby, Ruby on Rails, React, Redux, SQL, HTML, CSS, Git, MongoDB, PostgreSQL, Node.js, Linux, Express.js Amazon Web Services (AWS S3), Heroku, Object Oriented Programming (OOP), Test Driven Development (TDD), Webpack, jQuery

## **PROJECTS**

Bandlamp | (React / Redux, Ruby / Rails 5, PostgreSQL, AWS S3)

live | github

Full-Stack single-page application for browsing and streaming of music for bands and musical artists.

- Integrated secure user authentication, combining BCrypt password encryption with Rails database validations HTTP response error handling to render accurate sign-in, sign-up, sign-out, and error information to the user.
- Implemented a properly normalized state allowing for fast and seamless browsing across a media rich environment by taking advantage of React and Redux's efficient handling of store.
- Incorporated AWS S3 cloud storage with Rails and PSQL for fast and safe management of large media files.

Progress Slacker | (Javascript, React, Redux, Node, Mongoose, Express, Node (MERN)

live | aithub

MERN Stack single-page application where users can create fun templates and memes to be viewed on the site.

- Devised media management process for rendering user-uploaded image files as compressed DataURIs for storage and retrieval in a limited space MongoDB.
- Built a responsive user interface for simple, dynamic image editing using HTML 5 Canvas.
- Integrated a "like" system where users can tag images they enjoy and collectively review them on a personalized show page.

JavaScript Oscilloscope | (JavasScript, AudioContextAPI, CanvasAPI)

live | github

Built in JavaScript, application for generating tones and rendering visualization of the resulting sine wave.

- Explored the Javascript AudioContextAPI, specifically the OscillatorNode interface, to produce variable drones with user interface for controlling frequency and gain.
- Utilized core principles of object oriented programming (OOP) to integrate disparate entities, the AudioContext
  Oscillator nodes and the HTML 5 Canvas elements, to generate an animated oscilloscope feature by dynamically
  calculating changes based on user affected controls.
- Designed an original, intuitive, and striking interface which coaxes user interaction without prompt or need for quidance.

## **EXPERIENCE**

Distance Learning Program Coordinator
Digital Education Specialist for Distance Learning
2019

Aug 2016 - Sept 2017 Sept 2017 - Jan

Manhattan School of Music

- Administered the implementation and schoolwide adoption of a learning management system (Canvas) through
  processes of designing initiatives, leading faculty and student workshops, assisting in the creation and curriculum
  structure of online classes.
- Expanded the faculty and student user base from 4 faculty utilizing the technology in 5 classes in the first semester to dozens of faculty and all enrolled students (600+) within 2 years.
- Designed and developed initiatives to accelerate the LMS project adoption including informational media, design templates, instructional documentation, instructional videos, and managing related interdepartmental coordination.

French Horn 1 Jan 2019 - March 2020

Les Miserables 2017 North American Tour

- Performed 8 shows weekly to sold-out, 2000+ seat theaters, amounting to over 500 performances of Les Miz.
- Served as union steward for the orchestra,

## **EDUCATION**

AppAcademy - 16 week full-stack, software development program teaching comprehensive FE, BE curriculum. a/A 2021 Temple University - Master of Music, French horn, 2008-2010 Indiana State University - Bachelor of Science in Music, 2003-2008