Matthew **Buckner**

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SKILLS Ruby, Rails, Javascript, Node.js, Express.js, React, Redux, SQL, PostgreSQL, AWS, HTML5, CSS3, Sass, jQuery, Jest, RSpec, Git

WORK SAMPLES

SOUNDSTORM   (Ruby on Rails, PostgreSQL, React, Redux, Sass, AWS)   live | github
SoundStorm is a full-stack, single-page music web application.

- Migrated application from Heroku to AWS using DevOps best practices, enabling greater application monitoring and future scalability. Services used include: RDS, OpsWorks (Chef), ELB, EC2, S3, CloudWatch, and CloudFront.
- Integrated Jenkins for continuous integration and delivery.
- Generated audio peak data using Wavesurfer.js and cached in the Postgres database for optimal efficiency when rendering waveforms.
- Created top-level music player using HTML5 audio and React, giving the user seamless audio streaming during site navigation.
- Leveraged custom event listeners and the Redux cycle to dynamically sync audio waveforms and play-pause toggle buttons

POKE LOG   (Node.js, Express.js, PostgreSQL, Sequelize, React, Redux, SCSS)   live | github
Poke Log is a responsive web application that allows Hemophilia patients to log their infusions and injuries.

- Utilized CSS media queries to create a fully responsive, device agnostic design.
- Structured the Express app to follow the MVC framework and engineered the REST JSON API for CRUD operations.
- Configured the Node backend with PostgreSQL, using the Sequelize ORM for validations and database queries.
- Implemented local strategy for user authentication with Passport.js, using BCrypt for password hashing.

PACMAN   (Javascript, HTML5, Canvas, CSS3)   live | github
Tribute to the 1980's classic arcade game.

- Generated intelligent, movement-based animation using asynchronous Javascript.
- Developed collision detection algorithm for sprite characters, and integrated with keystroke event listeners to seamlessly predict the players future direction and movement.
- Implemented the A* search algorithm to compute shortest path to target, producing ghost AI behavior.
- Created tile map data structure for holding game state and calculating point total.
- Leveraged Web Audio API and event listeners to add in-game sound effects.

EXPERIENCE

Professional Musician
Managed my own business as a performer, educator, and producer.   2010 - 2017

- Fostered and maintained a private studio of 20+ students, and was a featured guest artist at several college music programs.
- Developed comprehensive teaching curriculum for Tampa Music School to cater to specific student needs, resulting in 100% student retention during tenure as instructor.
- Spearheaded several collaborative recording projects, managing production, arrangements, and personnel.

EDUCATION

App Academy | Software Engineering (2017) - *Immersive software development course with emphasis on full-stack web development and computer science fundamentals.*
University of Miami | Bachelor of Music (2015), *cum laude*