

Gabriel McDonald

27A St. Mark's Ave. #3 • Brooklyn, NY • 11217

CELL (646) 864-6911 • EMAIL gabrielmcdonald1@gmail.com



[Portfolio](#)



[GitHub](#)



[LinkedIn](#)

SKILLS

Ruby
HTML
AWS

Clojure
CSS
Postgres

Java
Flux
RSpec

Rails
SQL
Lisp

JavaScript
Haskell
Docker

React.js
Git
Nginx

Python
jQuery
TypeScript

EMPLOYMENT

American Physical Society

(2017 -)

Software Developer

- Worked both client-side and server-side maintaining, updating and expanding a large suite of web applications (predominantly in Clojure, Ruby on Rails and Java) for managing the country's most prestigious physics journals.
- Built RESTful endpoints for a new API-based communication system with a third-party vendor for one of the APS journals, enabling manuscript .zip file retrieval, notification posting, etc. and secured using JWT.
- Introduced shareable Clojure components via a private Maven repository and a library for shareable React/TypeScript components using Storybook.
- Upgraded the testing suites for all of the company's Java apps to JUnit 5.

EDUCATION

Syracuse University - Syracuse, NY

(2013 - 2017)

M.A. in Philosophy

University of Notre Dame - Notre Dame, IN

(2008 - 2012)

B.A. cum laude in Philosophy

PROJECTS

StoneCloud - Full stack music app inspired by SoundCloud

[Live](#) | [GitHub](#)

Ruby on Rails, Postgres, AWS, React/Redux

- Generates custom waveforms using the wavesurfer JavaScript library which track playback progress, sound frequency, and allow track navigation.
- Synchronizes play/pause buttons, waveforms and progress bar by appending the track ID to the HTML element IDs.
- Protects track and profile editing/deletion with back end user authentication built with the BCrypt gem for Rails.

Droog - Audio visualizer - *JavaScript, HTML5, CSS3*

[Live](#) | [GitHub](#)

- Extracts frequency data using the HTML5 web audio API and passes it to the D3 Javascript library to dynamically render visual representations of that data.
- Audio analyzer can receive input from either an uploaded audio file or user microphone input via HTML5's MediaDevices interface.

ShallowBlue - Chess program for text-based terminals - *Python, Haskell* [GitHub](#)

- Intuitive, user-friendly interface rendered using the C ncurses library.
- Supports special moves such as castling and pawn capture *en passant*.