

# MICHAEL COATES

## SOFTWARE DEVELOPER

MICHAELMCOATES@GMAIL.COM | 951 834-4549 | BROOKLYN, NY

[LINKEDIN: MICHAELMCOATES](#) | [GITHUB: MICHAELMCOATES](#)

[ANGELLIST: MICHAEL-M-COATES](#) | [PORTFOLIO: MICHAELMCOATES.COM](#)

## PROJECTS

### GREENHOUSE | [LIVE LINK](#) | [GITHUB](#)

RUBY ON RAILS - POSTGRES - JAVASCRIPT - REACT - REDUX - HTML - CSS

*Full-stack crowdfunding application inspired by Indiegogo*

- Utilized trigram indexing to implement fuzzy searching and increase search speed.
- Configured models to accept nested attributes, which streamlined campaign and perk creation actions by eliminating superfluous operations.
- Combined CSS3 animations with React to implement a seamless carousel.
- Parameterized database queries to prevent SQL injection and protect database integrity.
- Remotely stored user uploads in the cloud using AWS S3 to reduce server load and improve scalability.

### OPUS | [LIVE LINK](#) | [GITHUB](#)

D3 - JQUERY - JAVASCRIPT

*Artist-discovery data visualization application utilizing the Spotify Web API*

- Constructed a framework that allows users to create dynamic, force-directed graphs of musicians and their networks, in order to improve their ability to find music they like.
- Created a small Node.js/Express server that fires off server-to-server AJAX requests to the Spotify API, to prevent CORS errors, and fetch artists' information, connections, and music.
- Tightly formatted JSON response data and added it to the DOM in a controlled manner with both jQuery and D3 to maintain the structural integrity of the visualization.

### WISDOM | [GITHUB](#) | [LIVE DEMO](#)

JAVASCRIPT

*Lightweight DOM-manipulation library inspired by jQuery*

- Built methods that applied DOM functions on a grand scale, with improved readability.
- Included AJAX request functions that return Promises, to allow function chaining.

## EXPERIENCE

### APPACADEMY | JUNIOR TEACHING ASSISTANT

MAY 2017 - JULY 2017 | NEW YORK, NY

- Rewrote portions of the intensive coding curriculum to improve clarity and retention.
- Reviewed JavaScript, Ruby, and SQL student code on a regular basis, emphasizing proper habits of readability, performance, and style.

### PINNACLE PREP | PRIVATE TUTOR

JUNE 2015 - FEBRUARY 2017 | BROOKLYN, NY

- Privately tutored dozens of students in the SAT, ACT, SSAT, and ISEE, with some students seeing score increases of over 400 points.

## SKILLS

RUBY

RAILS

JAVASCRIPT

REACT

REDUX

JQUERY

HTML5

CSS3

SQL

POSTGRESQL

PHOTOSHOP

RSPEC

GIT

AWS

TDD

D3

HEROKU

## EDUCATION

### APPACADEMY

SOFTWARE  
DEVELOPMENT  
(2017)

### BROWN UNIVERSITY

BACHELOR OF  
SCIENCE:  
BIOCHEMISTRY &  
MOLECULAR  
BIOLOGY (2014)