

# Michael Roess [Portfolio](#) · [Github](#) · [LinkedIn](#)

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## SKILLS

PostgreSQL, Ruby, Rails, jQuery, JavaScript, React, Flux (Redux), HTML5, CSS3

## PROJECTS

**goodBooks** (React/Redux, Rails) | *Sole Developer* [live](#) | [github](#)

*Single Page Library Management App inspired by Goodreads*

- Designed modular React components with custom Redux wrappers for highly maintainable, DRY code
- Reduced database overhead by eliminating  $n + 1$  queries with custom SQL

**DiscoGraph** (JavaScript, D3, Discogs API) | *Sole Developer* [live](#) | [github](#)

*Visualize Music-popularity data across time*

- Integrated data from distinct API calls in a single chart with D3 library
- Masked pre-fetched data with CSS3 to improve app responsiveness
- Composed dynamic API calls to increase application interactivity
- Throttle outgoing API requests

**rORM** (Ruby, SQL) | *Sole Developer* [github](#)

*Object Relational Mapping library in Ruby*

- Wrote dynamic Ruby method generators providing models with access to columns and associated model records
- Create custom SQL queries to create, save, and update entries of subclasses

**EXPERIENCE** **Research Assistant Professor** - *Stony Brook School of Medicine (2014-present)*

- Created custom Rails app for grant funded pilot study of 500 research subjects
- Oversaw development of integrated curriculum from disciplinarily diverse faculty as Co-Director of MA program; new curriculum approved by NYS SED & SUNY

**Post Doc** - *Stony Brook School of Medicine (2012-2014)*

- Improved SEO for departmental website, increasing traffic by a factor of 10 as well as user engagement in MA section

**EDUCATION** **Web Development** - *App Academy (Winter 2016)*

- Immersive software development course; < 3% acceptance rate
- Full-stack web development: Ruby, Rails, SQL, JavaScript, React, algorithms, and programming best practices

**PhD Philosophy** - *Stony Brook University, December, 2012 (4.0 GPA)*

- Taught and studied formal logic