

Jonathan Liu

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[LinkedIn](#) | [GitHub](#) | [Portfolio Site](#)



EXPERTISE

Ruby
Three.js

Rails
jQuery

JavaScript
React.js

Redux
Python

HTML
CSS

SQL
Git

PROJECTS

Ask()

[Live Site](#) | [Github](#)

Single-page application for asking and answering questions inspired by Quora. Created using Ruby on Rails, React, and Redux.

- Secured user data with a customized authentication system using BCrypt for password hashing and SecureRandom for session tokens.
- Optimized data-fetching by bundling JSON responses to a single AJAX request for each view.
- Implemented a search bar with autocomplete using the PgSearch Ruby gem for PostgreSQL trigram searches.

Synesthesia

[Live Site](#) | [Github](#)

Browser-based music visualizer created with Three.js and the Web Audio API.

- Designed 3D visualizations in Three.js with cube, plane, tube, and particle geometries.
- Normalized audio sampling rate to ensure consistent quality experiences.
- Supported customization through local music uploads with an input tag.

EXPERIENCE

Administrative and IT, Contract | December 2016 - March 2017

Medows CPA, New York, NY

- Developed scripts in Python to handle batch file transfers and increase employee efficiency.
- Onboarded 2000 clients from a firm merger into new Client Relationship Management and Document Management System software.
- Directed network setup and expanded the workstation domain by 40%.

EDUCATION

APP ACADEMY (Summer 2017)

Immersive software engineering program with 1000+ hours of coding and < 3% acceptance rate. Curriculum emphasis on full-stack development, algorithms, and data structures.

YALE UNIVERSITY (Spring 2015)

BA - Economics