
Jonathan Tsao

Software Developer

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Projects

ShareTube (Rails · PostgreSQL · JavaScript · React.js · Redux)

A video-sharing single-page web application inspired by YouTube

- Utilizes asynchronous nature of AJAX calls to update React components in real time
- Incorporates a sensitive search functionality using phoneme and trigram similarities
- Stores user avatars, videos, and video thumbnails using Paperclip and AWS S3
- Integrates both RESTful and non-RESTful APIs in Rails to maximize frontend maintainability

Sushi Ninja (JavaScript)

A single-page game written in JavaScript using p5, inspired by Fruit Ninja

- Integrates p5 (processing library) to render canvas 60 frames per second
- Involves user interaction event firing on mouse and key presses
- Manipulates object position updates every frame using kinematics

Senro (Ruby · PostgreSQL · Rack)

Views and controller framework written in Ruby and PostgreSQL

- Allows for integration of Rack Middleware and creates view based on HTTP request
- Handles use of static pages elements and HTTP request errors

SKILLS

Ruby	SQL	Rails	ActiveRecord	JavaScript	jQuery	React
Redux	HTML5	CSS3	Git/Github	TDD	Python	

EXPERIENCE

Carnegie Mellon University (Creswell Group), Pittsburgh, PA

Research Experiment Conductor

December 2016 - May 2017

- Administered two-hour task-performance experiment while analyzing participant reactions
- Extracted emotion indices using facial feature recognition software for investigation

EDUCATION

App Academy, New York, NY

July 2017 - September 2017

Immersive 1000+ hour web development bootcamp with < 3% acceptance rate

Carnegie Mellon University, Pittsburgh, PA

Bachelor of Science, Chemistry

August 2013 - December 2016

- GPA: 3.93 / 4.0