

AMANDA LEE

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SKILLS

- Front-end: JavaScript, React, Redux, HTML5, Sass/CSS3, jQuery
- Back-end: Ruby on Rails, SQL, Postgres, jBuilder, AWS S3, RSpec

PROJECTS

Leeway · full-stack web messaging application, inspired by Slack

[Demo](#) | [GitHub](#)

React/Redux, Rails, Action Cable, AWS, Webpack, PostgreSQL

- Leveraged Action Cable to implement Websocket channel creation and subscription, allowing for live chat and message feeds with real-time updating
- Streamlined backend data fetching by merging tables for channels and direct messages to maintain a DRY codebase
- Integrated AWS S3 to store profile images in the cloud, reducing server load and allowing app to scale gracefully
- Hardened session/user authentication with protected routes using the React Router DOM library, BCrypt password hashing, and constraints at model and database levels

Snippet · Chrome extension displaying daily "snippets" of <60-second lessons and news

[Demo](#) | [GitHub](#)

JavaScript, jQuery, APIs: Chrome Storage, Reddit, NYTimes, The Oxford Dictionary

- Replaces the default Chrome "New Tab" page with API-supplied content, providing a snippet of easily-digestible informations
- Asynchronously stores and retrieves data using Chrome Local Storage, resulting in persistent daily "snippet" data, favoriting functionality, user access to past "snippets," and a customizable to-do list

Perception · multi-sensory memory game with animated graphics

[Demo](#) | [GitHub](#)

JavaScript, Anime.js, HTML5 Canvas, Webpack

- Integrated the Anime.js API with positional equations and HTML5 Canvas by adapting the API configuration to target objects rather than HTML elements, allowing for more DRY code and custom animations
- Incorporated a Finite State Machine computational model to implement game matching logic, enabling sequential flow with a single state
- Displayed a dynamically updating score and progressional messages by manipulating graphic elements when in a certain state of the Finite State Machine

EXPERIENCE

Conference Speaker at the International Conference on Big Data and Education (ICBDE)

Investing Chronological Correlations Between Asthma and Climate Data

Honolulu, Hawaii (Mar 2018)

- Applied Watson Analytics to NIH and EPA data to discover how emissions can indicate future asthma rates
- Generated data visualizations using geolocation, pollutant concentrations, and asthma rates to illustrate patterns

Research Assistant

The Scripps Research Institute, Karbstein Cancer Lab

Jupiter, FL (May 2016 - Jul 2016)

- Configured computational models to analyze gene composition and determine locations for mutation insertion
- Discovered 2 novel structural interactions in assembly proteins (Has1/Rrb5/Noc1-2) that link cellular ribosome assembly, thus advancing understanding of methods to disrupt this pathway in cancerous cells

EDUCATION

App Academy

Full-Stack Software Development

San Francisco, CA (Summer 2018)

- 1000-hour software development bootcamp with <3% acceptance rate, focusing on Ruby, Rails, JS, and React