**PROJECTS**

**Flipr**

**Live:** [**flipr-app.herokuapp.com/**](https://flipr-app.herokuapp.com/) **| Github:** [**github.com/hanqingchen15/Flipr**](https://github.com/hanqingchen15/Flipr)

*Ruby on Rails 5, PostgreSQL, Amazon AWS, JavaScript(ES6), React.js, Redux.js, HTML5, SASS*

Single-paged photo-sharing web application that allows users to upload photos, and curate their own albums. Features user authentication and responsive photo displays.

* Implemented BCrypt for password hashing, and React Router in conjunction with session tokens for restricted pathing to prevent unauthorized access.
* Leveraged React render functions and components to dynamically switch the page’s background based on a user’s location.
* Integrated Amazon S3 cloud storage solution with PostgreSQL database backend using ActiveStorage queries, resulting in a smoother user experience and better application scalability in the future.
* Improved the responsiveness of the main page through CSS3 grids.

**Super Smash Browser**

**Live:** [**bit.ly/smashbrowser**](https://bit.ly/smashbrowser) **| Github:** [**github.com/Battjmo/SuperSmashBrowser**](https://github.com/Battjmo/SuperSmashBrowser)

*JavaScript, HTML5 Canvas, CSS, Adobe Illustrator*

A chrome extension that allows users to selectively hide elements in a webpage. Users can choose different animations that accompanies the actions.

* Manipulated JavaScript DOM to select and interact with objects displayed on a webpage.
* Created new HTML5 canvas elements on top of said DOM objects to render destruction animations.
* Designed and animated custom cursors using Adobe Illustrator.
* Facilitated collaboration through careful system design, consistent Git workflow, object oriented programming, and modular code

**Canvas Pacman**

**Live:** [**hanqingchen15.github.io/pacman**](https://hanqingchen15.github.io/pacman) **| Github:** [**github.com/hanqingchen15/pacman**](https://github.com/hanqingchen15/pacman)

*JavaScript, HTML5 Canvas, CSS*

A Vanilla JavaScript remake of the classic PacMan game.

* Designed multiple levels using boundary mapping with an array in HTML5 Canvas.
* Used randomized number generator to implement a rudimentary AI that pursues the player character.
* Wrote modular and reusable code by leveraging Object-Oriented Design.

**Experience**

**Staff Scientist**

*PacGenomics Inc.*                                                                                   Nov 2015 - June 2018

* Advised and implemented the UI/UX portions of the physicians’ web portal, including designing and testing new features, such as document preview and upload, that streamlined the app’s interface while providing additional functionalities.
* Programmed automated liquid handling device with protocols to run experiments, which reduced assay runtimes by up to 50%. Additionally, instructed co-workers on the operation of the liquid handling devices.
* Identified and corrected many inefficiencies in our testing pipeline, reducing the turnaround time for rush cases to under 16 hours from over a day previously.

**Research Assistant**

*McNamara Lab, University of California – San Francisco*                                      Oct 2014 - Aug 2015

* Incorporated R statistical prediction models and Microsoft Visual Basic to improve data collection rates by prioritizing samples that showed potentially useful genetic expressions.
* Conducted densitometry measurements of protein stains using image editing software such as Gimp.
* Designed, and aggregated and analyzed data from, multiple experiments to generate a model for the role of inflammatory STAT proteins in Sjogren’s Syndrome.

[github.com/hanqingchen15](https://www.github.com/hanqingchen15)

[hanqingchen15.github.io](https://hanqingchen15.github.io/)

[linkedin.com/in/hanqingchen15](https://www.linkedin.com/in/hanqingchen15/)

**SKILLS**

**Backend:**

Ruby

Ruby on Rails

PostgreSQL

MySQL

Amazon AWS

**Frontend:**

JavaScript

React.js

Redux.js

HTML5

CSS3

**Testing:**

RSpec

Capybara

Jest

Enzyme

**Design:**

Adobe Illustrator

**EDUCATION**

University of California, Berkeley

B.A. Molecular & Cell Biology,

Infectious Diseases Emphasis

2011 – 2015

App Academy

Software Developer

2018

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SOFTWARE ENGINEER

**HANQING CHEN**