

# HANQING CHEN

## SOFTWARE ENGINEER

(310) 951-0388



[h.chen93@gmail.com](mailto:h.chen93@gmail.com)



San Francisco, CA



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



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



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



### EDUCATION

University of California, Berkeley  
B.A. Molecular & Cell Biology,  
Infectious Diseases Emphasis  
2011 – 2015

App Academy  
Software Developer  
2018

### 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

### PROJECTS

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

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

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

*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.