# <u>SKILLS</u>

JavaScript, ES6, React, Redux, HTML5, CSS3, Ruby on Rails, MongoDB, Node.js, Express.js, SQL, Git, Python, Webpack

# **PROJECTS**

**DisGuy** | (Ruby on Rails 5, React/Redux, JavaScript, ActionCable/Websockets, HTML5, CSS3, Webpack) live | github A full-stack, single-page web app clone of Discord (a web communication platform)

- Leveraged Rails Action Cable and Redis to establish web-socket connections and stream messages for live-chat.
- Incorporated custom frontend restrictions and validations to avoid unnecessary AJAX requests.
- Utilized withRouter to obtain information needed directly from the url path and avoid requesting data through multiple layers of components.

#### TracNova | (MongoDB, Express, React, JavaScript, Node, HTML5, CSS3, Nodemon)

#### A collaborative MERN stack app where the user can track their habits and see correlations

- Employed CSS3 Flexbox for flexible layouts and visually appealing designs.
- Built a secure user authentication system, utilizing Bcrypt to hash and salt passwords, strengthening protection of user data.
- Utilized Passport to authenticate the user's json web tokens before allowing them to make changes to documents in their accounts.

#### Geese Shooter | (JavaScript, HTML5, CSS3, Webpack)

#### A side-view 2D platform shooter game built using Canvas and Vanilla JavaScript

- Implemented HTML Canvas to dynamically render 2D shapes and bitmap images to create visually compelling background and game characters.
- Incorporated a custom drawlmage function to render different frames of the source image at calculated timepoints, creating smooth and visually appealing animation for game characters.
- Attained a communication network with requestAnimationFrame, collision detection, and custom functions between the main character and surrounding features for an interactive gameplay.

## **EXPERIENCE**

#### Research Associate I

Biotium, Inc.

- Performed >300 Bioconjugation reactions for production and research, resulting in 98% customer satisfaction.
- Executed Quality Control tests weekly for outgoing products using lab techniques including ELISA, HPLC, Gel electrophoresis. Achieved 95% pass rate, resulting in viable product launch.
- Conducted protein stability studies on over 100 chromophoric conjugates, presented research results weekly to the board members, and assisted the launch of 3 new products with >150% brightness level.

#### **Operations Assistant**

Karius, Inc.

- Leveraged SQL queries to preload data and generate graphical reports for the lab team, allowing better visualization of the research progress for non technical company members.
- Processed internal orders and shipping labels for NGS reagent & other research accessories.
- Sorted all incoming mail including interoffice mail, packages and delivered to appropriate personnel, resulting in >10% increase in productivity.

### **EDUCATION**

AppAcademy - Highly selective full stack web development program with a 3% acceptance rate. Graduated 2021 University of California, Davis - BS Pharmaceutical Chemistry. Graduated 2018

#### Feb 2019 - Jan 2021

#### Aug 2018 - Sep 2018



live | aithub

# CHRIS HONG Portfolio LinkedIn Github