# Douglas Ryu

(412) 880-3125 douglasryu@hotmail.com LinkedIn Github Portfolio

SKILLS JavaScript, React, Redux, Git, Advanced Algorithms, Data Structures, HTML5, CSS3, Node.js, SQL, Python, Flask, Docker

## **PROJECTS**

Elbows Live Site | Github

Full stack social network platform inspired by Instagram – React, Redux, JavaScript, HTML, CSS, Node.js, PostgreSQL, Python, Flask, SQLAlchemy, Psycopg2, PyJWT, AWS S3

- Established fluid user experience through utilizing AJAX and React state change to dynamically render views so that liking a post, commenting, and updating user information will take place without a page reload.
- Implemented a dropzone to automatically upload user images to AWS S3 by integrating React-dropzone, Boto3, and AWS CLI APIs so that users can seamlessly upload images.
- Designed a custom notification modal by using SQLAlchemy and manipulating data from the backend route to ensure that users can see the latest follow, comment, and like activities in chronological order.

Just Camp Live Site | Github

A web app inspired by Hipcamp that provides campsite information, booking, and the ability to leave reviews – React, Redux, JavaScript, HTML, CSS, Node.js, PostgreSQL, Express, JWT, Bcryptjs, Google Maps API

- Ensured user privacy and authorization through dynamically rendering components such as navigation items on the frontend and utilizing bcrypt password hashing function on the backend.
- Accomplished fluid navigation of campsites through creating a custom search component using regular expression to dynamically render suggestions based on the user input.
- Implemented Google Maps API to display location information visually as well as allowing users to observe the campsite prior to booking through Google Street View.

Rockinhood Live Site | Github

Full Stack application that offers the ability to monitor stock prices and trade stocks, inspired by Robinhood – Node.js, D3.js, Express, JavaScript, HTML, CSS, PostgreSQL, Bcrypt, Pug, JWT

- Integrated Bcrypt and JWT to enforce user authentication and autonomy allowing for users to customize their watchlists and secure owned assets.
- Implemented Yahoo Finance API and created custom methods to parse the appropriate company information and stock data for the last 30 day period to minimize request number and response size.
- Constructed stock and portfolio graphs by utilizing the D3.js library to allow users to conveniently observe the stock trends.

Flash Live Site | Github

Full Stack E-commerce app that specializes in photography equipment – React, Redux, JavaScript, HTML, CSS, Node.js, PostgreSQL, Python, Flask, SQLAlchemy, Psycopg2, PyJWT

- Ensured fluid and dynamic user experience through implementing custom React states and layouts so that users can easily search, add to cart, purchase, and leave a review.
- Designed custom navigation panels with brand logos and images, responsive featured items carousel using react multi carousel library, as well as custom search component to achieve easy navigation of all products from the main page.
- Implemented redux and local storage to save cart items and the JWT token to ensure that user information and items added to cart are persisted throughout page refreshes.

## **EXPERIENCE**

### **Physical Chemistry Research Assistant**

Department of Chemistry, Colgate University

Summer 2015 - Summer 2016

Utilized custom built least squares analysis software to determine the gas phase molecular structures of 1,2-dichloro,
1,2-dibromo, 1,2-difluorocyclohexane, Zn(HFA)2, Cu(HFA)2, Co(HFA)2, and Fe(HFA)2 within 1% of error.

#### Interpreter Officer, Operations Branch; Army Sergeant

Republic of Korea(ROK) Army; ROK-US Combined Forces Command(CFC)

*Spring 2013 – Spring 2015* 

 Revised and published over 400 military operations orders including CFC, USFK, and UNC Secret orders; awarded the Army Commendation Medal from the United States Forces Korea Chief of Staff and ROK Commendation for Excellence from the Deputy Commander of Combined Forces Command for distinction during the military exercises.

#### **EDUCATION**

**App Academy -** Immersive 1000-hour software development course with <3% acceptance rate **Colgate University -** BA - Biochemistry

Summer 2020