

Ko-Hsin Chu

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TECHNOLOGY

Proficient JavaScript, React, Redux, Node.js, Express, PostgreSQL, Sequelize, Git, HTML, ES6
Knowledgeable D3, R, SQL, Phaser.io, Passport.js, Jasmine, Mocha, Enzyme, Chai, Heroku, OAuth, CSS3

PROJECT

ON MY LINE <http://on-my-line.herokuapp.com>

D3, Firebase database, React, Redux, Express,

Progressive web app for finding variety of events and places off of your subway line

- Designed and implemented zoomable and clickable interactive map in a React component using D3
- Taught team how to intergrate React with D3 using ref attribute and by controlling data flow
- Integrated Yelp, Google Places, and Meetup API calls with D3 interactive functionality
- Agile workflow supported by daily standups and waffle.io

BEERMAN BOX <https://beerman-box.herokuapp.com>

Phaser.io, Cheerio.js, React, React-Redux, Express

Educational phaser game which teaches users about various beer styles

- Created front-end around the game with React and game logic with Phaser.io for a four-day Hackathon
- Controlled React state by switching Phaser game state depends on user input
- Programatically retrieving data needed from a website into a PostgreSQL database using Cheerio.js
- Won Grace Hopper Program Peoples' Choice award

NYC CRAFT <https://beer-beer-beer-beer-beer.herokuapp.com>

Passport.js, Stripe, React, React-Redux, Express, D3

E-commerce site where customers can shop for craft beer

- Led implementation of persistence of carts via express sessions, checkout functionality, authentication, construction of express routes during a seven-day sprint through Agile workflow
- Created administrative panel allowing admins access to CRUD capabilities in managing stock, orders, and users.
- Tested with Mocha/Chai and implemented Agile Project Management into our workflow

Data Mining Project for Multivariate Data Analysis

R Programming

- Manipulated & analyzed complex, high-volume, high-dimensional multivariate datasets from varying sources
- Performed data simulation and used statistical modeling techniques to forecast future data set.
- Communicated complex quantitative analysis in a clear, precise, and actionable manner

Petrochemical Process Development Project

Aspen Plus

- Designed and determined the most preferable scheme to separate olefins from a natural gas stream by evaluating technical and financial feasibility using Aspen Plus® and Microsoft Excel with a team of six
- Negotiated joint venture agreements with other teams to optimize the potential probability for our team

EXPERIENCE

Winemaking Lab/Cellar Assistant, Marcassin Vineyard

July 2017 - November 2017

- Assisted in grapes processing, must/wine chemical additions, cold soak/fermentation management, yeast inoculation, racking, and barreling down of premium Pinot Noir and Chardonnay production
- Took part with daily ferment data (brix, temp) and sample collection for tasting, analysis, and various trials

Winemaking Intern, Dobbles Family Estates

July 2016 - December 2016

- Responsible for additions from crush to barrel, lots ranging from 1.5 ton ferments to 25,000 gal ferments
- Utilized high-throughput titrators (free/total SO₂, pH, TA), ChemWell-T system (NOPA, ammonia, malic and acetic acid, RS), and EtOH via Anton-Paar's alcolyzer

EDUCATION

Fullstack Engineering Student

Master of Engineering in Chemical Engineering - GPA: 3.78

Bachelor of Science in Chemical Engineering

Grace Hopper Program at Fullstack Academy

Cornell University

National Taiwan University