

San Francisco, CA
(415) 802-6873
melvinlouie.estrada@gmail.com

Melvin Estrada

Software Engineer

github.com/melvinest
linkedin.com/in/melvin-estrada

Technical Skills

Front-End: JavaScript, ES6/7, HTML/CSS, ReactJS, Redux, AngularJS, Backbone.js, jQuery, Flow Router

Back-End: NodeJS/ExpressJS, Python, MongoDB/Mongoose, MySQL, PostgreSQL, Redis, REST

Tools: Underscore, Webpack, Jest/Enzyme, Mocha/Chai, Docker, Git, VBA, Matlab, AWS, Heroku, MeteorJS

Software Engineering Projects

Werk Table | github.com/TeamW3rk/info | github.com/TeamW3rk/proxy-melvin

Real-time online restaurant reservation application, designed the restaurant info's back-end to handle webscale traffic

- Optimized ExpressJS server to handle 10K requests per second on a MongoDB containing 10 million records
- Achieved a 40% web response time reduction by adding a Redis caching layer to the server
- Implemented a proxy server that carried out server-side rendering for Search Engine Optimization

Welp | github.com/teamwelp/reviews | welp1.herokuapp.com | welp-reviews1.herokuapp.com

Online business directory with user reviews and ratings, responsible for the reviews microservice

- Built server using ExpressJS and MongoDB that can handle search, sort and paging queries
- Utilized reusability of ReactJS components to generate repeating elements such as dropdowns, review/user entry and pagination
- Developed a proxy server that merged all microservices making them accessible via a single endpoint

Wazzup! | github.com/melvinest/wazzup | wazzup1.herokuapp.com

Real-time chat application built with MeteorJS

- Utilized MeteorJS full-stack reactivity to implement real-time chat feature
- Implemented client-side routing via Flow Router to differentiate various states of the application and to enable browser history and bookmarking

Breakout React | github.com/melvinest/breakout-react | breakout-react.herokuapp.com

A breakout game powered by ReactJS

- Employed ReactJS lifecycle methods to handle game's collision detection, score counter and brick layout

Professional Experience

Eichleay Inc | Engineer 1 | 2017

- Designed pipe supports for a proposed 3000 ft firewater line replacement project

Sunlink Corp | Structural Design Engineer | 2016-2017

- Reduced the required engineering man-hours by 60% by developing Python scripts that automated the creation of structural models
- Refactored existing excel templates using VBA, improving template sizes and spreadsheet load times by 60%
- Improved capability of legacy Matlab design template by integrating a Python script that eliminated user inputs, streamlining the user experience
- Converted current Matlab-Python design template into a purely Python codebase resulting in a 30% calculation time improvement due to the elimination of scripts interfacing two different programming languages

Fluor Corp | Associate Design Engineer 2 | 2014-2016

- Automated 90% of the structural engineering templates with VBA, optimizing design delivery by 50%
- Designed steel pipe rack structures for an \$11B petrochemical project located in Louisiana

Chiyoda Corp | Engineer 2 | 2012-2014

- Designed various steel and concrete structures for a \$34B LNG project located in Darwin, Australia

AMH Philippines Inc | Apprentice Engineer | 2012

- Analyzed geotechnical conditions for a \$35B coal-fired power plant project

Education

Hack Reactor, Advanced Software Engineering Immersive Program
University of the Philippines, B.S. Civil Engineering, Cum Laude

San Francisco, 2018
Manila, 2011