

# Jake Walsh

## Web Developer and Technical Adventurer



<https://jkwalth127.github.io/my-portfolio-page/>



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<https://github.com/jkwalth127>



Sonoma, CA

## CAREER OBJECTIVE

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As a programming hobbyist, I have spent several years building scripts for algorithmic stock trading, as well as chart indicators to assist in interpreting market fluctuations. Knowing that I wanted to work with the emergence of blockchain-based projects, I enrolled at the UC Berkeley Extension and earned my full-stack web development certificate. I am currently aspiring and working towards getting hired at a company, small or large, to help build their platform.

Outside of programming, I received a B.S. in biochemistry from UC Davis and have spent 4+ years as an aircraft structural mechanic for the California National Guard. I am confident that my wide array of technical skills equip me to easily adapt and quickly become a productive asset and trusted colleague.

## TECHNICAL SKILLS

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Languages: HTML5/CSS, Javascript, PineScript (by TradingView)

Libraries: jQuery, Redux, Handlebars, Bootstrap, Tailwind

Databases: SQL (MySQL with Sequelize ORM), NoSQL (MongoDB with mongoose ODM), Salesforce (SOQL with Apex DML)

Tools: Git, ReactJS, NodeJS, AJAX, Express, GraphQLwith Apollo, Jest

## EDUCATION

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B.S.  
Biochemistry & Molecular Biology  
**University of California, Davis**  
January 2019 - March 2022  
Davis, CA



Full-Stack Certification  
**UC Berkeley Extension**  
March 2022 - June 2022  
Berkeley, CA

## WORK EXPERIENCE

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### Structural Helicopter Mechanic

#### California Army National Guard



February 2018 - current



Stockton, CA

- Performed repairs and custom fabrications to assist in maintaining our unit's Chinook CH-47 and Lakota UH-72 airframes.
- Received recognition for domestic support for participating in the deployment to the state capital during the civil unrest in the summer of 2020
- Volunteered for full-time orders from July of 2020 to March of 2021 to perform structural repairs on helicopters that were being used to combat the wildfires that season

## PROJECTS

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### BTC Trading Algorithm

#### Creator

Deployed: [https://bit.ly/i\\_BTC\\_bot](https://bit.ly/i_BTC_bot)

- This script is meant to instruct a trading bot to open long and short
- It is shown operating from June of 2018 to June of 2022. During this 4 year period, the algorithm outperforms Bitcoin by over 25x, earning a 51x net return on investment.
- The PineScript language and the TradingView development platform were used.

### ETH Trading Algorithm

#### Creator

Deployed: [https://bit.ly/i\\_ETH\\_bot](https://bit.ly/i_ETH_bot)

- This script is meant to instruct a trading bot to open long positions on Ethereum.
- It is shown operating from July of 2017 to July of 2022. During this 5 year period, the algorithm outperforms Ethereum by nearly 23x, earning a 60x net return on investment.
- The PineScript language and the TradingView development platform were used.

## Custom RSI Stock Indicator

Creator

Deployed: [https://bit.ly/i\\_custom\\_rsi](https://bit.ly/i_custom_rsi)

- This is an indicator meant to assist investors in deciphering an asset's current trend and the momentum behind it.
- This was my first custom indicator built using TradingView's coding platform and proprietary language, PineScript. A technical understanding of several traditional indicators was required, and PineScript's UI development capabilities allowed me to mold them into a single, user-friendly display.
- The PineScript language and the TradingView development platform were used.

## Garden Buddy

Co-creator

Repository: [https://bit.ly/i\\_garden\\_repo](https://bit.ly/i_garden_repo)

Deployed: [https://bit.ly/i\\_garden\\_deployed](https://bit.ly/i_garden_deployed)

- This project is a full-stack website meant to provide home gardeners with planting schedules, growing guides, and a place to store details and notes on their past gardens.
- My initial roles were to connect the API route to fetch growing schedules based on a user's zip code, as well as implement our database and the necessary routes to read and create the notes that would be stored there. I also designed the page layouts and css styling, and developed many of the React components that were used in this project.
- HTML/CSS, JavaScript, ReactJS, NodeJS, Express, MongoDB, Mongoose, Apollo GraphQL, Bootstrap, Javascript Web Token, and bcrypt were used to build this project.

## PWA Text Editor

Creator

Repository: [https://bit.ly/i\\_editor\\_repo](https://bit.ly/i_editor_repo)

Deployed: [https://bit.ly/i\\_editor\\_deployed](https://bit.ly/i_editor_deployed)

- This project is a standard text editor that can save user inputs, but also can be downloaded as a progressive web application so that it can be utilized offline.
- IDBdatabase is used to store data on the browser, webpack is used to minify assets to lower load time, the manifest plugin is used to provide instructions necessary to install the app locally, workbox is used to build out the service worker that can fulfill requests without network connectivity, and the babel CLI is used in the build process to compile ES6 code to older versions.
- HTML/CSS, JavaScript, NodeJS, Express, Mongoose, webpack, html webpack, workbox, babel, babel loader, and css loader were used to build this project.

## Social Network API

### Creator

Repository: [https://bit.ly/i\\_social\\_repo](https://bit.ly/i_social_repo)

- This project is a back-end API built to mimic the functionality of a large-scale social media application.
- An Express server was configured to connect to a Mongo database that utilized the Mongoose ODM. Models were made for Users, their Thoughts they could post, and their Reactions to other user's thoughts. CRUD actions apply to each model.
- JavaScript, NodeJS, Express, MongoDB, and Mongoose were used to build this project.

## GitProductive

### Co-creator

Repository: [https://bit.ly/i\\_gitproductive\\_repo](https://bit.ly/i_gitproductive_repo)

Deployed: [https://bit.ly/i\\_gitproductive\\_heroku](https://bit.ly/i_gitproductive_heroku)

- This project was my first complete, full-stack web application. It was designed by programmers to offer a few useful features to anyone who works from a computer.
- I took part in building front-end stylesheets, html pages, and scripts to give core functionality to parts of the application. I also worked on the back-end creating RESTful routes to accomplish things like user signup and login, as well as granting the user CRUD actions on self-input data. Finally, I assisted in deploying the site and its MySQL database to the Heroku cloud.
- NodeJS, TailwindCSS, Google Fonts, daisyUI, AnimeJS, MySQL, Sequelize, Handlebars, Bcrypt, Connect Session Sequelize, Express, Express Session, and dotenv were used to build this project.

## Tech Blog

### Creator

Repository: [https://bit.ly/i\\_blog\\_repo](https://bit.ly/i_blog_repo)

Deployed: [https://bit.ly/i\\_blog\\_deployed](https://bit.ly/i_blog_deployed)

- This full-stack blog allows users to signup and login/logout, to create, edit, and delete posts, and to comment on the posts of other users.
- An express server equipped with a Sequelize ORM was used to connect a MySQL database to the front-end. Handlebars.js was used to dynamically generate elements populated with stored data. Tailwind was used to style the site, and bcrypt and dotenv was used to secure user information.
- JavaScript, Tailwind, Handlebars, Express, Sequelize, MySQL2, bcrypt, dotenv, express-handlebars and express-session were used to build this project.

## SQL Employee Tracker

Creator

Repository: [https://bit.ly/i\\_tracker\\_repo](https://bit.ly/i_tracker_repo)

- This back-end app runs in the node.js environment and prompts the user so that they can easily outline aspects of their organization. The app generates tables within the console that display the information.
- A series of JavaScript classes were made to create the general layout for each department, role, and employee. Inquirer was used in conjunction with node.js to be able to present the user with interactive prompts that would pass input into the generated console tables. All user-submitted data is saved to a MySQL database.
- JavaScript, node.js, MySQL2, console.table, and Inquirer were used to build this project.

## Team Profile Generator

Creator

Repository: [https://bit.ly/i\\_team\\_generator\\_repo](https://bit.ly/i_team_generator_repo)

- This back-end app runs in the node.js environment and prompts the user so that they can develop profiles for a team of employees. The app generates an html page that displays employee information on personalized cards.
- A series of JavaScript classes were made to create the general layout for each employee role, and all were tested using Jest. Inquirer was used in conjunction with node.js to be able to present the user with interactive prompts that would pass input into the generated html page.
- HTML, CSS, JavaScript, node.js, Jest, and Inquirer were used to build this project.

## Weather Dashboard

Creator

Repository: [https://bit.ly/i\\_dashboard\\_repository](https://bit.ly/i_dashboard_repository)

Deployed: [https://bit.ly/i\\_dashboard\\_deployed](https://bit.ly/i_dashboard_deployed)

- This app fetches current and 5-day forecast weather data for a user-specified location.
- I utilized two third-party APIs to retrieve weather data and jQuery to display it. Local storage is used to save previous searches.
- HTML, CSS, JavaScript, jQuery, Moment.js, and OpenWeatherMap API were used to build this project.

## Password Generator

### Creator

Repository: [https://bit.ly/i\\_generator\\_repo](https://bit.ly/i_generator_repo)

Deployed: [https://bit.ly/i\\_generator\\_deployed](https://bit.ly/i_generator_deployed)

- This app generates random passwords with user specified lengths and character/capitalization requirements.
- I developed this app to practice creating object-oriented JavaScript functionality.
- HTML, CSS, and JavaScript were used to build this project