

# William Duffy

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[PORTFOLIO](#)

[GITHUB](#)

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**SKILLS** JavaScript | Python | Node.js | React | Redux | Flask | Express | SQL | Git | HTML5 | CSS3 | Docker | Heroku

## PROJECTS

**TradeTwits** | (React, Redux, Flask, PostgreSQL, SQLAlchemy, Docker, Chart.js)

[live](#) | [github](#)

- Processed and displayed real-time stock market data throughout the app by simultaneously leveraging YH Finance API, Finnhub API and Alpha Vantage API.
- Implemented stock searches, comments, replies, likes, and follow functionalities by leveraging RESTful APIs and standardized CRUD patterns
- Created custom modal framework using React component architecture allowing for efficient development of new forms.

**The Stonks** | (React, Redux, Flask, PostgreSQL, SQLAlchemy, Chart.js)

[live](#) | [github](#)

- Designed an interactive, custom chart with React and Chart.js to graph stock data from Redux.
- Enhanced efficiency of fetching thousands of data points with a Redux store which reduced load time and API cost.
- Customized user session authentication using Flask, werkzeug, wtforms, and React.

**Squora** | (React, Redux, Express, PostgreSQL, Sequelize)

[live](#) | [github](#)

- Engineered token-based security infrastructure using Express, Bcrypt, and JSON Web Tokens.
- Configured the express backend with PostgreSQL, using the Sequelize ORM for validations and database queries.
- Adhered to React and ES6 best practices to generate a true single page reactive web app experience.

**MemeHub** | (JavaScript, Express, PostgreSQL, Sequelize, HTML5, Pug)

[live](#) | [github](#)

- Visualized a flexbox layout and JavaScript sorting algorithm to dynamically display trending content.
- Architected AJAX to update likes, comments and follows asynchronously, without refresh.
- Secured user privacy with backend Bcrypt password hashing and frontend authentication required routes.

## WORK EXPERIENCE

**Highland Capital Management, L.P.**

*Valuation Analyst*

Jun 2019 – Jun 2020

- Revamped CLO pricing procedures to move from a manual pricing process to an automated pricing feed which reduced risk and saved time for the CLO Team and Head of Structured Products
- Created and presented monthly valuation report to firm executives and partners highlighting key month-over-month variances across the fund complex

*Operations Analyst*

August 2017 – June 2019

- Improved reporting procedures for day-over-day cash flows by creating an Excel report detailing traded cash balances available for each fund. The report is used by the firm's executives and analysts to make investment/trade decisions
- Developed an Excel Macro to automate our accrued interest income reports which are sent to our administrators to be calculated into the funds' NAVs

**IHS Markit**

*Operations Analyst*

May 2015 – Aug 2017

- Created loan related reports to be incorporated into the final NAV calculation for various clients' funds
- Execute timely problem resolution to mitigate risk to the corporation and deliver excellent service to clients

## EDUCATION

**App Academy** - 1,000+ hour full-stack web development intensive bootcamp with < 3% acceptance rate | Sep 2021 - Mar 2022

**Texas Christian University – Neeley School of Business** - Bachelor of Business Administration, Finance Concentration | May 2015