

# ROMAN BARBALAT

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[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

**SKILLS** JavaScript, Python, React.js, Node.js, Express.js, Flask, AWS S3, PostgreSQL, Git, SQL, Sequelize, SQLAlchemy

## PROJECTS

### Gulp

[Live Site](#) | [GitHub](#)

*A soft yelp clone featuring businesses, reviews, favorites and replies to reviews.*

- Built the frontend with React in order to create an application that is interactive, dynamic, efficiently rendered and composed of reusable components.
- Used SQLAlchemy to create complex relationships between models and eager load data pulled from multiple tables in a single query.
- Implemented state management with Redux in order to share state between unrelated components, maintain data coming from a database and simplify debugging with Redux DevTools.
- Incorporated Amazon Web Services (AWS) S3 into the application for image uploads in order to improve the user experience while also improving the security and reliability of image file storage.
- Implemented a RESTful API to connect the frontend with the backend and provide scalability, flexibility and independence.
- Designed the underlying structure of the database and deployed it with PostgreSQL in production while using SQLite3 in development.

### Cypher

[Live Site](#) | [GitHub](#)

*A soft slack clone that allows users to interact with one another through direct messages and public channel posts.*

- Built the backend with Flask in order to create route handlers that are clear, maintainable and arranged in navigable blueprints.
- Employed Socket.IO to incorporate WebSockets into the application in order to create the direct message and channel message features.
- Pair programmed in rotating groups of two as part of a distributed four person development team. Refactored large chunks of code efficiently for both individual and team contributions.
- Utilized WTForms to validate user submitted data and generate error responses across multiple form fields in order to display validation errors to users upon form submission.

## EXPERIENCE

### Options Trader

May 2017 - Oct 2020

*Marquette Partners*

- Combined knowledge of recent order flow with volatility arbitrage to speculate on short term price changes in the natural gas options market.
- Served as an options market maker in the over-the-counter market while click trading in the electronic market.
- Single-handedly traded and risk-managed an options portfolio containing contracts with expirations up to four months away.

### Options Trader

May 2010 - Apr 2014

*Belvedere Trading*

- Made markets in a wide variety of options markets including the natural gas, oil, gold and S&P 500 markets as a member of both small and large teams.
- Traded through over-the-counter brokers over the phone and instant messenger as well as in the electronic market by click trading, operating a mass quoter and an electronic eye.
- Founded the company's night desk and traded in all ten markets that Belvedere had a presence in at the time.
- Taught an introductory course on option theory to new hires and also taught trading on a one on one basis to those students who fell behind in their mock trading classes.

## EDUCATION

**App Academy** - Twenty four week full-stack web development bootcamp

Feb 2023 - Aug 2023

**Carnegie Mellon University** - Master of Science in Computational Finance

Sep 2008 - Dec 2009

**Carnegie Mellon University** - Bachelor of Science in Mathematics

Sep 2004 - May 2008