

(646) 289-2641

cheung.masa@gmail.com

**PORTFOLIC** 

**GITHUB** 

**LINKEDIN** 

SKILLS JavaScript, Vue.js, React, Redux, PostgreSQL, Docker,, Express.js, Node.js, Java, SQL, SQLite3, jQuery, HTML5, Webpack, Git

## **EDUCATION**

Full Stack Development Certificate - App Academy | Summer 2021 BA Computer Science - Rutgers University - New Brunswick | May 2019

## **EXPERIENCE**

## **Software Engineer**

**BGC Partners**, Feb 2022 - Present

BGC Partners is a pioneering global brokerage and financial technology company

- Collaborated with business teams to design and implement a comprehensive grid view for bond trading, utilizing advanced techniques to ensure a seamless UI experience that met all business requirements.
- Developed and maintained React applications, ensuring accurate static data generation and launching auctions via Java, with rigorous WebSocket message validation to optimize system performance.
- Expanded trading support for the 'Volume Match Application' by 260%, resulting in an 800% increase in the client base and successfully expanding the platform from UK-centric to global markets.
- Diagnosed and resolved production issues, using log statement analysis and data collection techniques to create clear, actionable reproduction steps, significantly improving issue resolution time and development team efficiency.
- Managed and optimized a production monitoring application using Prometheus for time-series data and PostgreSQL for storing client login data, ensuring continuous system and client health tracking.
- Integrated Grafana with the database to visually represent client and system health, saving one hour daily for status monitoring and enhancing team efficiency in identifying performance issues.
- Streamlined CI/CD processes, establishing end-to-end pipelines from scratch and automating rollback procedures, resulting in a 60% reduction in system complexity and faster deployment cycles using GitLab CI and Docker containers.
- Collaborated in Agile teams, working with 8 cross-functional members across multiple time zones to deliver new features efficiently and communicate seamlessly throughout the development lifecycle.

## **PROJECTS**

MasaNote (Rails, React.js, Redux.js, ReactQuill, JavaScript, PostgreSQL, SCSS)

github

MasaNote is a single-page note-taking app that features a rich-text-editor, image uploading and autosaving

- Engineered secure RESTful authentication by encrypting passwords with BCrypt and generating and caching session tokens with use of non-deterministic, cryptographically strong random numbers.
- Applied customized design and functionality to react-quill library for smooth user experience in rich-text editing, extending functionality by implementing auto-save with native Javascript and React.
- Provided Notebooks feature for users to organize notes: renaming and deleting notebooks via modals as well as navigating directly to selected notebook to view all notes.
- Incorporated React-Redux container and Redux selector patterns to architect highly scalable and uni-directional front-end state management.
- Integrated HTML, SCSS, React and Redux to create overall fashion theme that provides user-friendly and intuitive interface.

**Dropping Down** (JavaScript, Canvas, HTML)

github

Dropping Down is a one player browser based game and the goal of the game is go down as many stairs as possible

- Constructed mathematics algorithm to randomly generate different types of stairs to increase difficulty of game and provide different effects and sound to player.
- Devised detection algorithm to determine player touch on stair or not and trigger the effect by passing data in two different classes.