MASA CHEUNG

(646) 289-2641   cheung.masa@gmail.com   **PORTFOLIO**   **GITHUB**   **LINKEDIN**

SKILLS JavaScript, React, Redux, PostgreSQL, Docker, Git, HTML5, jQuery, Test Driven Development (TDD), Prometheus, Grafana, WebSockets

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 leading global brokerage and financial technology firm.

- Partnered with business teams, including the Business Project Manager, to design and implement a sophisticated grid view for bond trading. Provided detailed feedback on the technical implementation of business requirements, ensuring alignment with strategic objectives. Utilized advanced methodologies to deliver a seamless and intuitive UI experience, enhancing both functionality and user satisfaction.
- Developed and maintained React applications, ensuring accurate static data generation and launching auctions via Java, with rigorous WebSocket message validation to optimize system performance.
- Collaborated within Agile teams across multiple time zones to deliver new features, maintain clear communication, and streamline continuous delivery processes through Test Driven Development (TDD). Provided detailed testing instructions to the QA team and conducted thorough testing before submitting merge requests, ensuring timely delivery.
- Optimized CI/CD processes by designing and implementing end-to-end pipelines from the ground up and automating rollback procedures, leading to a 60% reduction in system complexity and accelerated deployment cycles, utilizing GitLab CI and Docker containers.
- Spearheaded the expansion of the 'Volume Match Application,' increasing its business scope by 800% and driving a 500% growth in the client base, while transitioning the platform from a UK-centric to a global market. Designed and implemented robust software solutions to enable the trading of complex financial instruments, including Interest Rate Options (London, US Dollar), UK Inflation, EU Inflation, and European Government Bonds.
- Administered and optimized a production monitoring application using Prometheus for time-series data collection and PostgreSQL for storing client login information. Integrated Grafana to provide visual representations of system and client health, reducing daily status monitoring time by one hour and enhancing team efficiency in identifying and resolving performance issues.
- Identified and resolved production issues by leveraging log analysis and data collection methods to develop clear, actionable reproduction steps, resulting in a significant reduction in issue resolution time and enhanced efficiency within the development team.

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, encrypting passwords with BCrypt and employing cryptographically strong, non-deterministic random numbers for session token generation and caching, ensuring robust security.
- Customized the react-quill library to enhance the rich-text editing experience, incorporating auto-save functionality using native JavaScript and React to improve user efficiency and reliability.
- Delivered a Notebooks feature enabling users to organize and manage their notes, including functionalities for renaming, deleting notebooks via modals, and direct navigation to selected notebooks for viewing all associated notes.
- Architected a highly scalable, uni-directional front-end state management system by implementing React-Redux containers and Redux selector patterns, ensuring efficient data flow and maintainability.
- Integrated HTML, SCSS, React, and Redux to design a cohesive user interface, resulting in a visually appealing and intuitive theme that enhances the overall user experience.