



Ying Chyi Gooi

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EXPERIENCE

SpaceCraft // October 2018 - Present

Co-creator and Software Engineer — <https://spacecraft-repl.com>

- Co-created an open-source, in-browser REPL (Read-Eval-Print-Loop) that enables real-time collaboration between users using Node.js, WebSockets, and Docker
- Engineered state synchronization in the front-end REPL terminal and resolve conflicts through the use of CRDT and eventual consistency techniques
- Reduced network latency by at least 10% from removing the need to buffer outputs through server-side caching
- Strengthened security of application through container isolation techniques to prevent user-entered malicious code from affecting the host system
- Built a reverse proxy server from scratch using Node.js to forward requests to the appropriate containers and to manage multiple user sessions

Product Support Analyst // July 2017- December 2017

Global Atlantic Financial Group

- Analyzed universal life insurance policies and manipulated manual tools in Excel to produce accurate in-force illustrations
- Built custom Excel productivity tools to automate formatting of text data, reduced manual processing time from 5 minutes to less than a minute

PROJECTS

Airline Routes (React) <https://bit.ly/airline-routes>

Built a single-page application that displays information on routes flown by major airlines. Rewrote the SVG map component in Vanilla JS to reduce rendering time of 1700 SVG elements from ~400ms to ~60ms.

Ticket Tracker (Rails/SQL) <https://bit.ly/ticket-tracker>

Built an application that manages tickets by tracking issues and changes. Optimized ticket count from running $N + 1$ queries to a single SQL query.

Coin Exchange (Sinatra) <https://bit.ly/Coin-exchange>

Developed a digital currency exchange that allows users to buy or sell mocked digital currencies. Integrated with CryptoCompare API to track real-time price data.

EDUCATION

Launch School // January 2017 - December 2018

Software Engineering and Full-stack Web Development

Drake University // Graduated in December 2015

B.S.B.A. Actuarial Science

SKILLS

Back-end: Node.js, Ruby, Rails, PostgreSQL, RESTful APIs

Front-end: JavaScript, ES6, React/Redux, HTML/CSS

Other: Docker, DevOps