

Edward Chang | Software Engineer

Email: Edwardchang2000@gmail.com

Portfolio: <http://www.echang.dev/>

GitHub: <http://www.github.com/echang49>

Phone: +1 905 805 9149

LinkedIn: www.linkedin.com/in/edwchang

Citizenship: Canadian

Skills

JavaScript (TypeScript, Node.js, React JS, Next JS, Express), HTML5, CSS, Java, Python, C++, SQL, MongoDB, Redis, CI/CD (Docker, Jenkins, Kubernetes), UNIX, Cloud Computing (GCP, AWS), Testing (Jest, K6), Git

Work Experience

Pelmorex (The Weather Network) – Software Developer (Co-op)

Jan 2023 – May 2023

- Upgraded the accuracy of a weather description generator with over 2,000,000 daily API requests in TypeScript by 83% resulting in hyper-accurate weather descriptions for end-users. Unit tests built using Jest and automated with Jenkins.
- Reduced telemetry by > 93% in storage for the above application through log aggregation and reduction of log fields resulting in a decreased cost for storage space and more complex data analytics.
- Built Jenkins pipeline to automatically convert weather templates in Google Sheets to SQL databases stored on AWS S3 through Python and Pandas resulting in less developer dependencies for updates. Deployed on Docker and run in Kubernetes.
- Built load test with K6 and ECS Clusters to reach 50,000 requests/second to test product scalability.

Square Enix – Online Services Programmer Intern

Jan 2022 – Aug 2022

- Built an internal API tool in Java to track player in-game progress across multiple game platforms and send the data using triggers for data analytics resulting in a deeper understanding of player behaviour.
- Built a client-side rate limiting tool in C++ to preserve internal APIs from reaching capacity due to poor game code or bugs resulting in increased stability of internal game servers.
- Developed in an agile environment with daily scrum meetings, sprints, etc.

Salesforce (Formerly Traction on Demand) – Development Intern

May 2021 – Dec 2021

- In a team environment, created workflows and API endpoints in a custom Salesforce solution for a client resulting in a better client experience requiring less clicks to perform certain actions.
- Experience in all phases of Software Development Life Cycle (SDLC) and project life cycle processes from analysis, design, development, testing, and implementation.

Personal Projects

[NFT Portfolio](#) (Open Source) – Lead developer

- Launched an NFT portfolio web service based on market demand that reached over 11,000 unique users and 50,000 unique sessions within a month by launching a production web application using MongoDB, Express, Next.js, and Golang.
- Increased average engagement time of users 714% from 16 seconds to 1 minute 54 seconds by reducing the server's mean-time-to-failure and providing increased insights to users through data caching, mutual exclusion/data queueing, and more data scraping.
- Reverse-engineered website with NFT price data and rebuilt web scraper to decrease execution time 502% from 12 minutes 43 seconds to 2 minutes 32 seconds resulting in more accurate pricing data.

Education

Western University Bachelor of Engineering in Software Engineering

Fanshawe College Diploma in Travel and Tourism