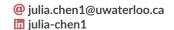# JULIA CHEN

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## EDUCATION

**Bachelor of Computer Science**
**University of Waterloo - CGPA 3.97/4.0**

🗓 Sept 2020 – Apr 2025

## SKILLS

**Languages:** TypeScript, JavaScript, Java, Python, C, C++, SQL, Bash, HTML, CSS
**Frameworks/Libraries**: React, Angular, Node.js, Express, Spring Boot, RxJs, Three.js, Bootstrap
**Tools:** Docker, Git, Github, Maven, MongoDB, PCF, Postman, Jira

## EXPERIENCE

**Front-end Engineer**
**Faire**

🗓 May 2023 – Aug 2023, Jan 2024 – Present

- Architected a brand portal webpage flow for e-commerce product catalog verification with **React**, **Typescript**, and styled-components, increasing projected gross merchandise value by up to 1.5% annually
- Created an automated ticketing system for catalog completeness verification to assign, visualize, and manage cases, replacing the need for manual business personnel queueing and saving up to 15 hours of work weekly
- Optimized codebase performance by writing custom **React Hooks** and integrating page load timing metrics captures, resulting in a 12% increase in brand component code coverage and an analytics dashboard for historical load timing
- Revamped the bulk product editor spreadsheet by implementing a new full-screen mode and custom header components, leading to greatly decreased table rendering time from cell refactoring and optimization

**Software Developer**
**MappedIn**

🗓 Sept 2022 – Dec 2022

- Designed an API used to create interactive 3D maps for venues such as malls or stadiums using **TypeScript** and **Three.js** as part of a major release of the V5 Web and Mobile SDKs, adopted by 5000+ venues worldwide
- Implemented label customization features on web and mobile with WebGL, resulting in 3D label appearances capable of being dynamically customized without cluttering or overlapping together when users spatially re-orient the map
- Created feature for display of multiple real-time animated location dots on maps with **TweenJs** and **Geolocation API**, allowing for asset-tracking and live location sharing use cases

**Software Developer**
**Royal Bank of Canada**

🗓 Jan 2022 – Apr 2022

- Led the architecture of a **Java Spring Boot** event logging service to map and encrypt secure login API event fields by consuming and producing to **Kafka** topics, improving logging efficiency by 92%
- Implemented an OAuth IdP internal tool for client onboarding, permission management, and environment tracking with **Angular**, **Typescript**, and **Node.js**, speeding up the internal onboarding cycle by 70%
- Developed a new automated service monitoring app with **RxJS** and **Express.js**, allowing for real-time health status updates, remote start/stop capabilities for service deployments, and downtime SMS notifications

**Software Developer**
**Toyota**

🗓 May 2021 – Aug 2021

- Implemented second-hand vehicle lookup and registration features used by 286 dealerships with **Java Spring** and **MSSQL** in an Agile SDLC environment
- Led a proof of concept to containerize web apps with **Docker** and migrate them from IBM Websphere Liberty server to Apache Tomcat

## PROJECTS

**Watchr** 🔗

- Created a desktop app that schedules screen recordings for live events with **React** and **Electron**, allowing entire windows to be captured and recording files to be automatically saved in a local directory

**Taskeeper** 🔗

- Built an interactive calendar web app for personal task management with the ability to nest and link tasks for enhanced organization using **React** for the UI and **Passport.js** for user authentication
- Created a **REST API** with CRUD operations using **Node**, **Express**, and **MongoDB**