

Hanlin Cheng

hanlincheng.me

h62cheng@uwaterloo.ca

linkedin.com/in/hanlincheng

github.com/hanlinc27

SKILLS

Languages TypeScript, JavaScript, Ruby, Java, C++, HTML, CSS

Technologies React, Redux, Rails, Vue, AngularJS, Express, Node.js, MongoDB, PostgreSQL, Cypress, Jest

EXPERIENCE

Software Engineer Intern — Modern Treasury

Sep 2022 - Dec 2022

- Built new programmatic payout and card flow endpoints in a financial ledger Ruby on Rails API to process **700K+** requests per week, optimizing database transactions with appropriate indexes and latency benchmarking
- Reduced round trip requests by **50%** for synchronous user fund demands by scoping and implementing the return of live ledger account balances on response attributes for the POST and PATCH ledger transaction API
- Implemented transaction metric graphs and ledger transaction version timelines in the product's dashboard interface using GraphQL and React (TypeScript), surfacing more actionable pricing insights to customers

Software Engineer Intern — Intuit

Jan 2022 - Apr 2022

- Developed and deployed customer tax return calculation steps to TurboTax Online, serving **5M+** peak users with XML, Java, Springboot, Maven, and AWS
- Owned the creation of a data scrubber service to filter personal identifiable information (PII) from key consumer metric data, affecting **860,000+** entries in Splunk

Software Developer Intern — Voiceflow

May 2021 - Aug 2021

- Developed React (TypeScript) and Redux components used by over **100K+** creators for a real-time, multiplayer canvas
- Built Voiceflow Transcripts, increasing monthly active users per workspace by **20%**, through creating microservice REST endpoints with Node.js, Express, PostgreSQL, and MongoDB

Fullstack Web Developer Intern — Imagine Communications

Sep 2020 - Dec 2020

- Created new streaming annotation features with AngularJS (TypeScript), PostgreSQL, and Node.js RESTful web services in a multi-threaded TV content and ingest playout web application to support **24,000** commercial channels
- Architected and published an embedded videoplayer API npm package in TypeScript for a third-party Vue widget

COMMUNITY

Undergraduate Research Assistant — Human-Computer Interaction (HCI) Lab

May 2022 - Aug 2022

- Investigated the effects of consuming climate change digital content under the advisory of Dr. Edith Law through topic exploration, conducting user interviews, qualitative coding, and regression modelling in R

Technical Lead — UW Blueprint (Community Fridge KW and Internal Tools)

Sep 2021 - Present

- Led and mentored a team of **7** developers to create a centralized food donation scheduling platform for **200+** volunteers with React (Typescript), Express, PostgreSQL, and Firebase; see it here
- Scoped project architecture decisions for admin check-in and scheduling flows, orchestrating relevant development changes across frontend and backend services

Project Developer — UW Blueprint (The Shoe Project)

Sep 2020 - Apr 2021

- Shipped an interactive map platform and administration dashboard in partnership with the Shoe Project using React (TypeScript), Go, PostgreSQL, and Docker to showcase Canadian refugee women's stories

Frontend Developer — Civic Tech Toronto

Feb 2020 - Dec 2020

- Collaborated with a team of **20** to design and implement a React application for the Accelerator Project, a grassroots initiative focused on mentoring under-housed youth, using JavaScript, Material UI, and Jest unit testing

EDUCATION

Candidate for BAsc. in Systems Design Engineering — University of Waterloo

Sep 2019 - Apr 2024 (Expected)

Relevant Coursework: Data Structures and Algorithms (C++), Human Factors in Engineering

Interests: Soccer, San Antonio Spurs, Watercolour Painting