ERIC CHEN

Markham, ON

Education

McMaster University

September 2020 - April 2025

Software Engineering Co-op (B.Eng)

Hamilton, ON

- Enrolled in level 4 of the 4 year Software Engineering Co-op program
- Awarded the McMaster President's Award for having a grade-point average of over 95% in secondary school
- Note: Currently on Co-op leave for one year and will be returning in Fall 2024 to complete final year

Experience

Esri May 2023 - Current

Software Engineer Intern

Ottawa, ON

Stencil.js, TypeScript, Node.js, ArcGIS JS-API, Figma

- Implemented an internal dependency graph visualizer with Cytoscape.js to identify and debug inter-connected dependencies amongst form expressions and related fields, reducing trouble-shooting time by 75%.
- Developed **3 custom CKEditor5 plugins**, streamlining content injection and dynamic popup styling via arcade expressions for users and **reducing input time by 15s** on average per usage.
- Designed and integrated a custom Language Service Protocol (LSP) to seamlessly integrate Monaco Editor with CKEditor 5, enhancing the user experience for editing source code within the platform. This innovation eliminated the need for manual copying and pasting, improving efficiency and productivity by 60% for users.

McMaster University, Cubic Transportation Systems

June 2022-November 2022

Software Developer Intern / Research Assistant II

Hamilton, ON

React.js, TypeScript, Tailwind CSS, Redux.js, OpenLayers, Node.js, Jest, Figma

- Worked within an agile environment alongside **3 software developers** to collectively build out a web interface, hosted through **MenloLab**, for an RTA traffic model that displays real-time data on improving traffic control
- Implemented 6 data charts using ReCharts and 4 OSMs through OpenLayers to display real-time traffic data on intersection safety, queue length, city health and traffic congestion within the city of Hamilton for thousands of users
- Developed and executed over **10 unit tests** using **Jest** to ensure the code quality, functionality, and reliability of all React components, pages, and Redux slices, resulting in a high-quality, bug-free web interface.

Gunkii

June 2022 - August 2022

Shopify Lead Software Development Intern

Vancouver, BC - Remote

HTML, CSS, JavaScript, SASS, Liquid, GTMetrix, PageSpeedInsights

- Lead and managed a team of **5 software development interns** to implemented user interface enhancements on CTA pages, resulting in a **15% increase in conversion rates** based on user interactions.
- Collectively bought down web load speed from **4.64s** to under **3s** (WEB + AMP site) for all devices and technology through media optimization, removal of unused applications/code, and pre-rendering UI content
- Oversee the implementation of **5 backlinks** and **3 professional videos** to help increase metadata information and boost SEO + SERP + TRUST + Authority, allowing Google to easily search, crawl, and index data pertaining to the live web and bring gunkii to **page one** of Google's SERP

Projects

Poolber | React Native, Node.js, Firebase, Figma, Google Maps API

April 2023

- Developed a user-oriented mobile carpool app that matches carpool requesters with carpool offerors to reduce trip cost
- Designed and translated 12 Figma wireframes into modular React-Native components/pages and routed all pages using React Native's stack navigator to create a seamless user experience

Genshin Impact Wish Simulator | Node.js, Genshin.js, Discord.js, MongoDB, Railway

Jan 2023

- Designed, developed, and implemented a custom Discord bot to simulate the gacha environment in **Genshin Impact**, increasing user engagement by **35%**, resulting in a more active and vibrant community
- The bot has been widely adopted by over **323 members** across **5 Discord servers**, demonstrating its popularity and effectiveness in enhancing the user experience

Tenzies | HTML, CSS, Javascript, React.js, Node.js, Figma, Vercel

April 2022

- Recreated die game Tenzies with 3 custom Figma wireframes and made use of React components and event listeners
- Utilized localStorage to store data pertaining to the game and formed the statistics page with 7 distinct records

Software/Technologies Java, Python, C, HTML, CSS, JavaScript, TypeScript, React.js, Next.js, Node.js, Express.js, Tailwind CSS, MongoDB, PostgreSQL, Verilog, LaTeX, MatLab, Unix Makefiles, Bash Scripting