

Christopher Lit

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EDUCATION

University of Ottawa

Bachelor of Science in Computer Science

GPA: 3.78/4

Ottawa, ON

Sept. 2022 – Dec. 2026

EXPERIENCE

Kinaxis

Jan. 2025 – Present

Software Engineer Intern | C++

Ottawa, ON

- Developing scalable and efficient algorithms for supply chain optimization. Working with linear programming and batch processing to improve decision making and improve operational efficiency

CEED

May. 2024 – Aug. 2024

Software Engineer Intern | Ruby on Rails, PostgreSQL, AWS

Ottawa, ON

- Designed a role management system using **Ruby on Rails**, leveraging Active Record ORM and **PostgreSQL**, allowing administrators to efficiently assign and manage user roles and permissions
- Optimized SQL queries for the shift scheduling system, reducing average query execution time by **50%**, minimizing conflicts in shift assignments
- Led the redesign of CEED's website in an **Agile** environment, focusing on developing personalized user dashboards and integrating user analytics to provide customized insights

PROJECTS

MediHub Healthcare App | Java, XML, Firebase, Android Studio, Git

- Implemented a login authentication system handling over **400 users** by utilizing Firebase's real-time database features
- Developed a high-efficiency shift scheduling system using a custom hashmap with **quadratic probing** to resolve collisions and handle user input, enhancing the application's performance.
- Designed **UI Pop-Up** cards in XML, integrating **asynchronous listeners** to dynamically fetch and display doctor schedules and contact information from Firebase Realtime Database
- Implemented an appointment booking system, utilizing **database queries with joins**, integrating appointment, doctor, and patient data together for efficient retrieval

Blackjack | JavaScript, React, HTML/CSS, Figma

- Implemented a responsive interactive betting modal using Framer Motion animations, elevating the user experience with engaging visual feedback during wager inputs
- Designed the website layout and card graphics with Figma, maintaining a unified color scheme and coherent design style
- Implemented a player leaderboards menu for users to track their progress, by utilizing a **binary search tree** for sorting and retrieval of player scores

Karnaugh Map Solver | JavaScript, React, HTML/CSS

- Optimized the derivation of algebraic expressions from user inputs, achieving linear time complexity, by utilizing **tail recursion** to identify neighboring cells
- Deployed additional grid selection options by incorporating don't care values as an option through combinatorial generation
- Engineered an interactive selection grid, optimizing user input storage with a **Map**. Employed **React** for dynamic rendering and **Tailwind CSS**

TECHNICAL SKILLS

Languages: Java, C++, Python, JavaScript, TypeScript, Ruby, Go, HTML, CSS

Frameworks: React, Node.js, Next.js, Express.js, Ruby on Rails, JUnit

Developer Tools: PostgreSQL, AWS, Firebase, Git, Linux, Android Studio, VSCode, Bash