

SAJEENTH SHIVAUTHAYALINGAM

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EDUCATION

University of Waterloo

Bachelor of Computer Science, Honours Co-op

Sep 2021 – Apr 2026

Notable Courses: Algorithms, Data Structures, Operating Systems, Linear Algebra, Object-Oriented Software Development

SKILLS

Languages: Python, Java, C, C++, TypeScript, JavaScript, Golang, Ruby, HTML, CSS, SQL, Kotlin

Frameworks/Libraries: React, Django, Ruby on Rails, Spring Boot, Node, Flask, Express, Pandas

Development Tools: Git, Azure, Docker, Kubernetes, AWS, Firebase, MongoDB, Jenkins, GraphQL, Kafka

EXPERIENCE

Incoming Software Engineer Intern, [PointClickCare](#)

Jan 2025 - Apr 2025

Software Engineer Intern, [PointClickCare](#)

Toronto, ON

Stack: *Java, TypeScript, React, Spring Boot, Azure SQL, Kubernetes, Cypress*

Jan 2024 – Apr 2024

- Optimized the unique identifier algorithm for **Twilio** conversations, enhancing precision from millisecond to nanosecond level, resulting in a **million-fold** increase in uniqueness, significantly reducing the likelihood of identifier duplication
- Spearheaded the development of a real-time notification system, implementing REST APIs with **Spring Boot** and **Java** and enhancing the frontend user experience using **TypeScript**. Integrated **Kafka** for event-driven messaging, ensuring message alerts delivery within 0.5 seconds on average
- Fine-tuned server-side infrastructure for the **Secure Conversation Service**, supporting a user base exceeding **1.2 million**. Managed and deployed the microservices using **Kubernetes**, efficiently handling over **30,000** messages daily
- Developed **Cypress** tests integrated into a **Jenkins** pipeline, to validate token generation for user authentication and message handling functionalities. Reduced test execution time by **24%** and enhanced test coverage by **35%**

Software Developer Intern, [Systems with Intelligence](#)

Mississauga, ON

Stack: *React, Java, AWS, Postman, Jest, SQL*

May 2023 – Aug 2023

- Designed a data-fetching application using **React** that seamlessly retrieves data from the local **Java** backend, effectively testing and validating the API endpoints with **Postman**, and displays real-time data updates
- Leveraged **AWS S3** and **RDS** for efficient data storage and retrieval, ensuring accurate database queries and complete test coverage with **Jest** and React Testing Library
- Integrated GitHub Actions into the CI/CD pipeline, reducing manual deployment time by **65%** and improving release speed by **30%** on AWS infrastructure

Software Engineer, [Avolta](#)

Toronto, ON

Stack: *ReactJS, Jest, Google Firebase*

May 2022 – Dec 2022

- Collaborated on major refactoring efforts, re-architected the front-end using **ReactJS** and implementing a **one-way data binding design**, resulting in a **37%** reduction in bug reports and a **25%** increase in development speed
- Participated in **code reviews** and pair programming to improve software quality and maintain best coding practices

PROJECTS/VOLUNTEER EXPERIENCE

Co-Founder, [CastleBrooke CS Club](#)

- Supervised and taught weekly **Python** and **C++** lessons/workshops to **100+** students
- Hosted and led the **school's first hackathon** and other coding competitions to prepare for UWaterloo's CCC

AI Chess Bot, [Object-Oriented Software Development Final Project](#)

- Developed a fully functional **C++** Chess game that adheres to the **MVC** design pattern, featuring an interactive user interface and advanced AI opponents for a challenging and engaging user experience
- Developed a custom **minimax algorithm with alpha-beta pruning** to power the AI opponent, enabling efficient decision-making and advanced move prediction

CryptoBase, [Spark Hackathon](#)

- Participated in a cryptocurrency-focused hackathon, where I collaborated with a team to create a React web application
- Developed a **React** web application that provides users with **real-time** market insights on trending cryptocurrencies
- Modified **Google's Programmable Search Engine** to deliver instant access to a curated collection of cryptocurrency-related websites for users.