Jason Hon

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 github | linkedin | jasonhon.com

EDUCATION

University of Waterloo   **2023 - 2027**

Bachelor of Computer Science, Artificial Intelligence Specialization   *Waterloo, ON*
- **GPA: 3.96 / 4.0 (CAV: 92.44%, Candidate for Deans Honours)**
- Relevant Coursework: Data Structures, Object Oriented Programming, Compilers, Elementary Algorithms
- Honours: CS Intl. Upper Year Scholarship, Presidential Scholarship of Distinction (Totaled CAD$ 8,000)

SKILLS

Languages	C / C++	Java	Python	JavaScript / TypeScript	SQL	HTML / CSS	Scala
Frameworks	React	NodeJS	AngularJS	NextJS	Flask	Express	Tailwind
Technologies	AWS	MongoDB	MySQL	Nginx	Docker	Git	Unix	Bash	Valgrind

EXPERIENCE

Huawei Canada   **Jan 2025 - Apr 2025**

Incoming Software Engineering Intern - Compiler   *Markham, ON*

UW Computer Science Club 〇   **Sept 2024 - Present**

Software Developer   *Waterloo, ON*
- Developed and maintained CodeyBot, a multi-functional Discord bot, utilizing **TypeScript, Docker, SQLite, Discord.js**, and **Sapphire**, to deliver features such as coffee chat matching, and mock interview scheduling
- Collaborated with a **team of 11** to review code and brainstorm innovative features, successfully deploying CodeyBot to a server with **over 4,500 members**, implementing various minigames and auto-mod features

Bonumcare   **June 2023 - Aug 2023**

Freelance Software Developer   *Remote*
- Engineered a "Conversation Buddy" for the elderly using an **Express** server on **AWS EC2**, deployed with **Nginx**, facilitating **over 300** message transactions daily through robust RESTful APIs.
- Redesigned the interactive chatbot user interface using **React, HTML, and CSS**, receiving positive feedback from 90% of elderly users.

NOTABLE PROJECTS

Lacs Compiler   **Sept 2024 - Present**
- Built a compiler and assembler for a **Scala**-type language with **context-free language parsing, analysis** and memory management features like **heap allocation** and **garbage collection**
- Implemented statically scoped nested procedures with **closure operations** to support object-oriented & functional programming, enhancing it with **tail call detection and optimizations**

UWCompass 〇 〇   **Aug 2024 - Present**
- Developed a **React** web application to parse student transcripts to identify required courses for degree completion, easing the course planning process for Waterloo students
- Leveraged **BeautifulSoup** to scrape and store **over 5000** courses and programs, using dynamic JSON handling to efficiently manage and enhance the scalability of academic program databases.

Chess Engine 〇   **Jun 2024 - Aug 2024**

Project Lead
- Developed a Chess engine in **C++** featuring various levels of **AI opponents**, using an algorithm that evaluate moves based on piece weights and other factors for complex decision-making
- Strictly adhered to **OOP** principles and advanced design patterns (MVC, Observer, Factory) to create a structured and maintainable codebase, ensuring high cohesion and low coupling.

SLMod 〇   **May 2021 - Dec 2023**

Project Lead
- Maintained and developed a portable **Java** game modification used by **over 40** daily users at peak, implementing changes accordingly based on user feedback.
- Led a **team of 5** to develop a user-tracking system on a **Flask** server on **AWS EC2** with data stored in **MongoDB**; displayed and processed **over 6,800** user log-ins on an online dashboard, implementing **OAuth2** via Discord API

VOLUNTEERING AND LEADERSHIP

UW Chinese Student Association, Marketing Executive   **May 2024 - Present**

Sunshine Action Club, Volunteer and Human Resource Manager   **Sept 2022 - May 2023**

Content Creator, YouTube (20,000+ subscribers, 3,000,000+ Views)   **Sept 2021 - May 2023**