

Steven Bai

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EDUCATION

University of Waterloo

Waterloo, ON

Honours Bachelor of Computer Science - 3.84 GPA

Sept. 2022 – May 2026

- Courses: Data Structures and Algorithms, Sequential Programming, Object-Oriented Programming, Operating Systems, Combinatorics, Graph Theory, Statistics, Calculus, Linear Algebra

TECHNICAL SKILLS

Languages: C/C++, Java, JavaScript, Typescript, HTML/CSS, Python, SQL

Technologies: React/React Native, Next, Pandas, Excel, Tailwind CSS, Node, Express, Angular, MongoDB, TortoiseSVN, Jenkins, Heroku

EXPERIENCE

Software Engineer

May 2024 – Aug 2024

AlgoMonster

Vancouver, BC (remote)

- Engineered automated data visualization and content generation tools using **NextJS**, **Python**, **matplotlib**, **pandas**, **Excel** and **OpenAI API** to enhance user-tailored coding interview guides.
- Trained a **GPT-4**-powered interviewing bot, leveraging advanced AI to simulate real-world coding interviews, significantly boosting user interaction and learning efficiency.

Data Engineer

March 2024 – Present

Datacurve.ai (YC W24)

San Francisco, CA (remote)

- Developed and annotated **hundreds** of high-quality coding questions in **C++**, **Python**, and **React**. Created comprehensive datasets used by **Cohere** to enhance the training of their **Coral AI** models, significantly improving model accuracy and performance.

Full Stack Developer

May 2023 – August 2023

Rich Media

Toronto, ON

- Spearheaded **Lean-Agile** development of white-label software for **Scotiabank** and **TD Bank** using **HTML**, **SASS** and **Angular**, enhancing **UI/UX** of banking and insurance tools used daily by **thousands** of Canadians.
- Improved internal project turnaround efficiencies by **25%** by using **TypeScript** and **Playwright** for **automated web scraping**, streamlining customization of client website frames and assets.

Frontend Developer

March 2021 – August 2021

iContribute

Ottawa, ON (remote)

- Developed **15+** user-facing pages and components on the client web portal using **React**, **MUI** and **Figma**, giving non-profit organizations and volunteers visibility into remote and in-person opportunities.
- Enhanced high school volunteering during the pandemic, used by **58** partnered organizations to connect with **1000+** active users on the mobile app, built on **React Native** and **Firebase**.

PROJECTS

chess | **C++**

Nov 2023 – Dec 2023

- Developed a fully-functioning chess game in **C++**, applying **Object-Oriented-Programming** principles, **Model-View-Control** and **Observer** patterns for 2-player and computer modes.
- Implemented chess AI with a **Minimax algorithm** optimized with **alpha-beta pruning**, reducing computation time by **500%** and achieving a **75%+** win rate against 1200 elo players.

AWARDS & ACHIEVEMENT

PureScholars Award in Mathematics

Sept 2022

University of Waterloo

- Awarded **\$5000** for excellence in community involvement, provincial-level athletics and **97%** admission average.
- Accumulated solutions to **1000+** competitive programming problems on **GitHub**, scored in the **top 5%** of the **Canadian Computing Competition** and ranked **top 2%** on **LeetCode**.