

## Austin Jiang

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Dear Cerebras Systems recruiting team,

I am a Computer Science student at the University of Waterloo applying for the AI Software Engineering Intern (Stack, Runtime, MLE) role. I am particularly passionate about performance, runtime systems, and machine learning infrastructure.

I am currently an undergraduate research assistant in the Multicore Lab at UWaterloo, where I work on extending Verlib (PPoPP'24) with **lock-free GPU data structures** for efficient range queries. My work focuses on **correctness and performance under concurrency**, including implementing CPU baselines for controlled benchmarking and debugging low-level GPU systems code.

Previously at Wolfram Research, I worked on a parallel cellular automata runtime, focusing on **execution design, performance optimization, and benchmarking**. I implemented sparse and dense execution strategies and achieved a **127% speedup** on low-activity states, with a custom benchmarking harness.

My competitive programming background, including being **two-time Canadian Computing Olympiad Silver Medalist (national top 10)** and **USACO Platinum**, reflects my solid understanding of data structures, algorithms, and systems fundamentals.

I am particularly interested in internships where correctness, reliability, and low-level understanding matter, and I would love the opportunity to contribute to your team.

Sincerely,  
Austin Jiang