

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 deeply interested in performance critical runtime systems and machine learning infrastructure, especially work that bridges systems engineering and large scale ML execution.

I am currently an undergraduate research assistant in the Multicore Lab at Waterloo, where I work on extending Verlib (PPoPP 2024) with lock free GPU data structures for efficient range queries. This work emphasizes correctness and performance under concurrency, including reasoning about memory consistency, validating GPU behavior against CPU baselines, and debugging subtle correctness issues in low level systems code.

Previously, at Wolfram Research, I worked on a parallel cellular automata runtime, focusing on execution design, performance optimization, and benchmarking. I designed tiled update schemes and halo exchange mechanisms, built benchmarking harnesses to analyze scalability, and iterated on runtime strategies based on profiling results.

In addition, my competitive programming background, including placing top 10 nationally in the Canadian Computing Olympiad twice and achieving USACO Platinum, reflects a solid understanding of data structures, algorithms, and systems fundamentals.

I am excited about the opportunity to contribute to Cerebras' compiler, runtime, and ML framework stack, and to help build reliable and high performance software for large scale AI systems.

Sincerely,
Austin Jiang