# Austin Jiang

a68jiang@uwaterloo.ca | github.com/AustinBoyuJiang | linkedin.com/in/austin-boyu-jiang

**Dear Hiring Manager,**

I am a Computer Science student at the University of Waterloo applying for your intern position. My background focuses on systems programming and performance, with an emphasis on building software that behaves correctly under real-world constraints.

I am currently an undergraduate research assistant in the Multicore Lab at Waterloo, where I work on extending Verlib (PPoPP'24) with **lock-free data structures on GPU** for efficient range queries. This work involves reasoning about concurrency and memory models, as well as validating correctness through controlled CPU baselines. In parallel, I have conducted research at Wolfram Research on parallel cellular automata systems, designing tiled update schemes and halo exchange to ensure correctness and scalability.

I also have a strong algorithmic foundation from competitive programming, having placed **top 10 nationally in the Canadian Computing Olympiad twice** and achieved **USACO Platinum**, along with experience building end-to-end systems under time constraints through hackathons.

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

Sincerely,
Austin Jiang