

## Luming Zhang

M.S. in Computer Sciences, [luming@cs.wisc.edu](mailto:luming@cs.wisc.edu)

Objective: Entry-Level position in Software Development & Engineering  
Strength: Excellent programming, algorithm skills. Fast learning ability and solving problem independently.  
Code Samples <https://github.com/luming89/CodeSamples>

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### EDUCATION

Sep. 2013 - Dec. 2015 *University of Wisconsin - Madison, Madison, WI, U.S.A.*  
M.S. Computer Sciences - College of Letters & Science, Department of Computer Sciences  
- GPA: 3.64/4.0  
Sep. 2008 - July 2012 *Xi'an Jiaotong University, Xi'an, Shaanxi, China*  
B.S. Microelectronics - School of Electronic and Information Engineering

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### SKILLS (Self Ranking: \*\*\*strong, \*\*good, \*familiar)

Languages C++ (CUDA)\*\*\*, Java\*\*\*, C\*\*, C#\*\*, Python\*\*, JavaScript\*, PHP\*  
OS & Database Unix/Linux\*\*, MySQL\*\*

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### PROFESSIONAL EXPERIENCES

*Software Development & Engineering Full-time at Amazon.com, Seattle, WA Feb. 2016 - present*

- Developing Digital Commerce Platform.

*Software Development & Engineering Intern at Amazon.com, Seattle, WA May 2015 - Aug. 2015*

- Developed a local configuration verifier which speeds up the original verification process by 1000x. Using Google Guice to inject dependency, Mockito to mock out unnecessary components and Jersey to make it a service.

*Project Assistant in the Department of Engineering Physics, Jan. 2014 - June 2014*

- Fixing bugs and exploiting parallelism of the Plasma Simulation Code which is recently rewritten with C(CUDA)

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### COURSE PROJECT

*Computer Graphics OpenGL & C++, Demo: <https://www.luminghub.com> F. 2014 & F. 2015*

- Improved a game engine and built a 3D Air Battle Game.
- Implemented SIMBICON walking controller using Open Dynamics Engine.

*Database Systems A Buffer Manager, A File Manager, using C++ Fall 2014*

- The buffer manager uses the Clock Algorithm to manage the buffer pool.
- The file manager supports all common operations and B+ tree indexing.

*Compiler CSX Compiler in Java & Passes of LLVM Compiler in C++ S. & F. 2014*

- Built a front-end CSX compiler which consists of a token scanner, a parser, a name analyzer, a type checker and a code generator.
- Implemented a back-end LLVM optimizer which performs peephole, live variable, loop invariant analysis and register allocation.

*Computer Architecture RISC Processor & GPU Warp Scheduler in C++ Fall 2013 & Spring 2015*

- 5-stage pipelined RISC processor which contains 16 instructions and a local branch predictor.
- Implemented a Criticality-Aware Warp Scheduler to replace naive ones like round robin, which is unable to hide latencies properly for many applications because of execution time disparity.

*Operating Systems XV6 operating system and programming using C Fall 2013*

- Implemented a shell, system calls, a process scheduler, virtual memory features, and a multi-threaded web server.

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### HONORS

- 2010 National Scholarship, top 5%