

Luming Zhang

M.S. in Computer Sciences, luming@cs.wisc.edu

Strength: Excellent programming, algorithm intuition and skills. Outstanding learning and problem-solving capability.

Code Samples <https://github.com/luming89/CodeSamples>

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: 3.6/4.0
Sep. 2008 - July 2012 *Xi'an Jiaotong University, Xi'an, Shaanxi, China*
B.S. Microelectronics - School of Electronic and Information Engineering

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

C++ (CUDA)***, Java***, C***, Python**, Unix/Linux**, MySQL**, JavaScript*

PROFESSIONAL EXPERIENCES

Software Development Engineer at Amazon.com, Seattle, WA *Feb. 2016 - present*

- Implemented and launched Charge Redrive feature which enabled the payment platform to retry declined charges automatically. Is the Technical Point of Contact.
- Designing and implementing Tax Only Refund feature, which will allow customers to initiate tax only refunds by themselves. Is the Technical Point of Contact.

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 external systems and Jersey to make it a service.

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

- Exploiting parallelism of the Plasma Simulation Code which is recently rewritten with CUDA C

COURSE PROJECT

Computer Graphics *C++ & OpenGL* *F. 2014 & F. 2015*

- Implemented a 3D Roller Coaster game using a Legacy OpenGL game engine.
- Wrote a Modern OpenGL game engine which supports lighting, meshing, object-hierarchy, collision etc., and implemented a 3D Air Battle Game
- Implemented SIMBICON walking controller using my game engine with Open Dynamics Engine integrated.

Database *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 *GPU Warp Scheduler in C++* *Spring 2015*

- 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.

HONORS

2010 National Scholarship, top 5%