

## **Luming Zhang**

MSEE candidate in Computer Engineering, luming@cs.wisc.edu  
Objective: Intern/Co-op position in Application/System Software Development  
Strength: Excellent programming, algorithm skills with solid knowledge on hardware.  
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, WI, U.S.A.**  
M.S. candidate - College of Engineering, Department of Electrical & Computer Engineering  
- GPA: 3.7/4.0  
Sep. 2008 - July 2012 **Xi'an Jiaotong University, Xi'an, Shaanxi, China**  
B.S. in Microelectronics - School of Electronic and Information Engineering

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

Languages C++ (CUDA)\*\*\*, C\*\*\*, Python\*\*, Java\*\*, Objective-C\*\*, JavaScript\*,  
Verilog HDL\*  
OS & Database Unix/Linux\*\*, MySQL\*\*

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### **PROFESSIONAL EXPERIENCES**

**Co-op at Sofity, Madison, WI, Jan. 2015 – (May 2015)**  

- iOS development – App Store: sofity, a social network with shopping platform app
- Web crawler using Python and Amazon Web Services database maintenance

**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)

**Research Assistant at the University of Science and Technology of China Sep. 2012 - June 2013**  

- Circuits design for experimental quantum communication system.

**Summer Intern at the Institute of Computing Technology, Beijing, China July 2012 - Aug.2012**  

- Use gem5 simulator to determine the variation of locality of shared memory on multicore platform with PARSEC 2.1 the workload.

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### **COURSE PROJECT**

**Computer Graphics 3D Air Battle Game, using OpenGL and C++ Fall 2014**  

- Improved a game engine and built a 3D Air Battle Game. Demo: <https://www.luminghub.com>

**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 Implemented a Wisc-Fall13 Processor with Quartus Fall 2013**  

- 5-stage pipelined RISC processor which contains 16 instructions and a local branch predictor.

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

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

**Graduate Project Evaluation of OpenRISC 1200 Core with Verilog Spring 2012**  

- Implemented an OpenRISC 1200 Core, which achieved 130434 Dhrystone iteration/sec when running at 100MHz and cost 5797 logic elements.

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### **HONORS**

- 2010 National Scholarship, top 5%