

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>

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

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

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

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.

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.

HONORS

- 2010 National Scholarship, top 5%