***Luming Zhang*** MSEE candidate in Computer Engineering, [luming@cs.wisc.edu](mailto:lzhang338@wisc.edu)

Objective: Intern/Co-op position in 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%