**Luming Zhang** MSEE candidate in Computer Engineering, luming@cs.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 201.

• 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%