***Luming Zhang*** MSEE candidate in Computer Engineering, F1 Visa

608-556-6182 Objective: Internship/Co-op/Entry Level position in Software Development. [luming@cs.wisc.edu](mailto:lzhang338@wisc.edu) 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

GPA: 85.4/100 Rank: 11/91

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**SKILLS**

Languages C++ (CUDA), C, Python, Java, JavaScript, Objective-C (App Store: sofity - 50%), Swift, PHP, HTML&CSS, Verilog HDL

OS & Database Unix/Linux, MySQL

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**PROFESSIONAL EXPERIENCES**

Jan. 2014 - June 2014 ***Project Assistant in the Department of Engineering Physics, University of Wisconsin – Madison***

Fixing bugs and exploiting parallelism of the Plasma Simulation Code. The PSC was re-written with CUDA C recently and some applications have bugs. All bugs found in the Harris Sheet Reconnection and the Kelvin–Helmholtz applications are fixed using CUDA-GDB.

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

PCB design for experimental quantum communication system.

July 2012 - Aug.2012 ***Research Assistant at the Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China***

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 Roller Coaster Game, 3D Air Battle Game with OpenGL and C++***

Fall 2014 Using game engine featuring mesh, shaders, render engine & physics engine.

Demo: https://www.luminghub.com

Database Systems ***A Buffer Manager, A File Manager with B+ tree indexing in 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 & Optimizer of LLVM Compiler in C++***

Spring & Fall 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 an 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 with Quartus.

Operating Systems  ***XV6 operating system and programming in C***

Fall 2013 Implemented an interactive shell, system calls, a process scheduler, virtual memory features, and a multi-threaded web server.

Graduate Project ***Performance and Area 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.