

Christopher Lu

Contact Information	307 S. Dithridge St Apt 407 Pittsburgh, PA 15289	<i>Phone:</i> (508) 404-9889 <i>E-mail:</i> chris@lulabs.net <i>WWW:</i> www.lulabs.net
Objective	To obtain a full-time position in systems programming or real-time logic design.	
Education	BS in Computer Science, Carnegie Mellon University, Pittsburgh, PA Expected graduation date: May 2010 Major QPA: 3.7	
Expertise	<ul style="list-style-type: none">• Programming: C, Standard ML, {x86, ARM, MIPS, Z80} assembly, Verilog• Software: gcc, Linux build toolchain, git, Xilinx ISE• Hardware: USB	
Experience	IVA Corporation , Sudbury, MA <i>Intern</i> 6/2009 - 8/2009 <ul style="list-style-type: none">• Wrote firmware for Cypress FX2-based USB Video Class (UVC) cameras.• Developed an efficient algorithm to buffer data for JPEG DCT transformation.• Gained experience with USB, UVC, and 8051 microcontrollers. Carnegie Mellon University , Pittsburgh, PA <i>Teaching Assistant</i> 9/2008 - 12/2008 <ul style="list-style-type: none">• Assisted 15-213 (Introduction to Computer Systems) course staff.• Taught students various systems programming fundamentals. Analog Devices , Wilmington, MA <i>Intern</i> , Digital Imaging Systems Group 6/2008 - 8/2008 <ul style="list-style-type: none">• Maintained datatool, an in-house program to analyze and visualize wafer test data. Extended it with multiple wafer capability and analysis.• Gained experience with large software projects. <i>Intern</i> , Digital Imaging Systems Group 6/2007 - 8/2007 <ul style="list-style-type: none">• Designed and implemented an FPGA-based data timing generator to replace the Tektronix HFS9003 stimulus system as part of a standard CCD driver test setup.• Tested CCD drivers and gained knowledge of CCD operation and test parameters.• Devised a systematic organization scheme for test data.	
Projects	'FireARM' ARM CPU <ul style="list-style-type: none">• Implemented a pipelined ARM-compatible CPU core in Verilog, with cache. MandelFPGA <ul style="list-style-type: none">• Designed and implemented a computational pipeline to interactively display a Mandelbrot fractal on a VGA monitor in real time, using an FPGA.	
Coursework	<ul style="list-style-type: none">• 15-410, Operating Systems Design and Implementation• 18-447, Introduction to Computer Architecture• 15-312, Principles of Programming Languages• 15-411, Compiler Design	