

Christopher Liow

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EDUCATION

PURDUE UNIVERSITY

COMPUTER ENGINEERING

Expected Dec 2015

West Lafayette, IN

BS IN COMPUTER ENGINEERING

Expected Dec. 2015

College of Engineering

First Year Engineering Honors Program

CENTRAL BUCKS EAST HS

Doylestown, PA

Graduated Summa Cum Laude

SAT: 2270/2400

COURSEWORK

SOFTWARE

Object Oriented Programming

Software Engineering Tools Lab

(BASH & Python 3)

Data Structures

Programming in Python

Advanced C Programming

Compilers

HARDWARE

ASIC Design

Microcontroller Design/Interfacing

Digital Computer Design & Prototyping

Electronic Circuit Analysis & Design

SKILLS

PROGRAMMING

Experienced:

Python • Java • C# • C • Verilog • Oracle

SQL • HTML/CSS/JavaScript/JQuery •

Familiar:

BASH • C++ • R • MySQL •

TOOLS/APPLICATIONS

Visual Studio • Eclipse • PyQt • MATLAB

OPERATING SYSTEMS

Windows • Linux • UNIX

LINKS

Github: github.com/purdo

HackerRank: hackerrank.com/chrisliow

LinkedIn: linkedin.com/in/cliow

EXPERIENCE

CLARITY PARTNERS LLC. | ASSOCIATE SOFTWARE ENGINEER

May. 2015 – present | Chicago, IL

- Design and develop at all layers (front-end + back-end) public-facing applications for civilians to access and utilize police resources.
- Co-authored Visual Studio library containing custom Bootstrap, WebGrid, and Form Validation extension methods for internal use.
- Create automated scripts that check/merge/edit/compare internal databases on a routine basis (Oracle SQL)
- Primarily used ASP.NET MVC with Entity Framework, experience with C#, HTML/CSS/JS, and Oracle SQL

DELPHI | SOFTWARE ENGINEERING AND DESIGN INTERN

June 2014 – Present | Kokomo, IN

- Implemented new features for Kayak and Bus Monitor applications in C#
- Developed new message tracking algorithm, drastically improved speed and increased message capacity 10x
- Wrote extensions to allow users to open/edit databases in variety of formats
- Organize and handle bugs and issues reported from users, continuously update software to meet client needs.

PURDUE LIBRARIES | WORKSTATION SUPPORT TECHNICIAN

May 2013 – Jan. 2014 | West Lafayette, IN

- Provided technical support for staff and faculty of Purdue Libraries
- Co-authored internal and external customer knowledgebase, as well as composing and editing operational documentation of processes and networks
- Worked independently and on small teams to solve technical issues that arise

DESIGN EXPERIENCE

DVI IMAGE PROCESSING ASIC

Dynamic image-adjustment ASIC capable of color correction

- Hardware implementation of the Daltonization color-correction algorithm for color blind users
- Able to keep up with 60FPS at 640x480 resolution while maintaining an average color error of <0.05%.

MULTICORE PROCESSOR

Designed a multicore processor capable of handling the MIPS instruction set.

- Pipelined to handle hazards from instructions, components, and memory as well as the ability to handle up to 5 instructions 'in flight'.
- Utilizes cache coherence to operate efficiently with multiple processors
- Capable of interfacing variable-latency RAM
- Written in Verilog and VHDL with automated scripts in BASH

HONORS/AWARDS

2015 Single Cycle Processor Design (ranked 7 out of 50+ in efficiency)

2012 Purdue First Year Engineering Honors Program

2012 Recipient of AT&T Foundation Scholarship

2011 Recipient of Purdue Presidential Scholarship (4 year scholarship)