

Christopher Liow

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EDUCATION

PURDUE UNIVERSITY
COMPUTER ENGINEERING
West Lafayette, IN

BS IN COMPUTER ENGINEERING
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
Data Structures
Programming in Python
Advanced C Programming
Compilers and Translation Systems

HARDWARE

ASIC Design
Microcontroller Design/Interfacing
Digital Computer Design & Prototyping
Electronic Circuit Analysis & Design
ECE Senior Design

SKILLS

PROGRAMMING

Experienced:

Python • Java • C# • C • Verilog • Oracle
SQL • HTML/CSS/JavaScript

Familiar:

BASH • C++ • JQuery • AngularJS •

TOOLS/APPLICATIONS

Visual Studio • SQL Developer • Eclipse •
ModelSIM • MATLAB

DATABASE

PL/SQL • MySQL • Oracle

OPERATING SYSTEMS

Windows • Unix/Linux

LINKS

Github: github.com/purdoo
HackerRank: hackerrank.com/chrisliow
LinkedIn: linkedin.com/in/cliow

WORK EXPERIENCE

CLARITY PARTNERS LLC. | ASSOCIATE SOFTWARE ENGINEER

May 2015 – present | Chicago, IL

- Develop public-facing applications for access and use of police resources.
- Create and deploy custom Nuget packages containing custom Bootstrap, WebGrid, and Form Validation extension methods for company use.
- Participate in the development of internal applications (in C#) for clients
- Write scheduled scripts that compare/merge/edit databases.
- Use ASP.NET MVC with EF, work with C#, HTML/CSS/JS, and Oracle SQL.

DELPHI | SOFTWARE ENGINEERING AND DESIGN INTERN

May 2014 – Mar. 2015 | Kokomo, IN

- Implemented new features for data logging applications in C# and Python
- Developed original message tracking/logging algorithm, drastically improved speed and increased message rate 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/PROJECT EXPERIENCE

TRADING INDICATOR MODELING PROJECT

Python library that calculates and models popular trading indicators

- Determines indicators such as RSI, MACD, Bollinger Bands, etc.
- Provides flexible plotting/graphing functionality of data for users
- Uses pandas and NumPy for data management, matplotlib for modeling, and Quandl's API for retrieving data

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
- Written with Verilog, created custom testing environment with Python

DVI IMAGE PROCESSING ASIC

Dynamic image-adjustment ASIC capable of color correction

- ASIC design of Daltonization color-correction for color blind users
- Interfaces a Xilinx TMDS Decoder(DVI), Encoder logic included in design

HONORS/AWARDS

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|------|---|
| 2015 | Barrett Robinson Design Award |
| 2012 | Purdue First Year Engineering Honors Program |
| 2012 | Recipient of AT&T Foundation Scholarship |
| 2011 | Recipient of Purdue Presidential Scholarship (4 year scholarship) |