

# Kaiser Hamid Rabbi

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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/purdoo](https://github.com/purdoo)

HackerRank: [hackerrank.com/chrisliow](https://hackerrank.com/chrisliow)

LinkedIn: [linkedin.com/in/cliow](https://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)