# Sam Christy

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I am a student at Iowa State University pursuing a degree in Electrical Engineering and a minor in Computer Science. I have experience designing, building, and testing electrical systems as well as extensive experience programming, especially in a Linux environment. I also have experience working on high pressure and challenging projects such as my senior design project, and my final project for integrated circuit design. I am currently seeking a job for after I graduate in the fall of this year.

## **EDUCATION**

Currently a Senior at Iowa State University

Majoring in Electrical Engineering with a Minor in Computer Science

Award for Competitive Excellence scholarship

Member of the Iowa State Chapter of the National Society of Collegiate Scholars

### **PROJECTS**

SI Attendance Management Senior Design Project [may1709.sd.ece.iastate.edu]

Lightweight Linux Desktop Environment

Binary star orbit simulator for the physics department at Iowa State

Device drivers for a secondhand Sony EVI-D70 video camera

4B5B digital encoder/decoder integrated circuit design via Cadence CAD software

PIC based LCD driver

Atmega based dotmatrix LED display

Assembly to machine language interpreter

3d rendering software in Python (without OpenGL and hardware acceleration) and later in C++ (With OpenGL)

OpenGL, DirectX and Graphics Device (GDI) programming

GIF file binary editor

Several Android apps including a logic gate simulator and scrabble board game

## **SKILLS**

Linux (especially Debian and it's derivatives)

Computer security (PfSense, Ubuntu Server, FreeBSD)

Embedded device programming (Microcontroller/FPGA/Raspberry Pi)

Familiar with CAD/SPICE software

Experience with more than 15 programming languages Esp. (C++/C, Python, Haskell)

Android programming

Soldering/Wave Soldering

LaTeX typesetting language

#### **COMPETITIONS**

2<sup>nd</sup> out of 44 teams in the 2017 Senior Design Projects

2<sup>nd</sup> place National Cyber Defense Competition-Spring 2016

1<sup>st</sup> place Iowa State Cyber Defense Competition-Spring 2015

#### **WORK EXPERIENCE**

Data Entry for the Iowa State Dept. of Education April-August 2016

Line Cook for Pepperjax Bar and Grill April-August 2015

Lowe's Commercial Loader May-August 2014

Volunteer at Methodist Hospital in Omaha 2012-2013

Corn Detasseling for Pioneer during the summer seasons of 2009 and 2010