# TAKONDWA KAKUSA

#### **OBJECTIVE**

To obtain a full time position with an emphasis on embedded systems, low level coding, or backend server coding

#### **EDUCATION**

B.S., ELECTRICAL ENGINEERING AND COMPUTER ENGINEERING, EXPECTED MAY 2017

M.S., COMPUTER ENGINEERING, EXPECTED MAY 2018

Virginia Tech, Blacksburg, VA

Cumulative GPA: 3.83; In major GPA: 3.85 University Honors College, August 2013 - Current

#### **SKILLS**

# **Software languages:**

C, C++ (including OpenCV and Qt libraries), Perl, Python, LabVIEW, Matlab

# **Software:**

LTSpice, Quartus, Verilog, MPLAB, Arduino

**Certificates:** 

LabView CLAD Certification, May 2015 NOCTI Engineering Certification, April 2013 ACE Project Management certification, July 2013

#### **WORK HISTORY**

# INTERN, INTEL CORPORATION

May 2016 - August 2016

- Wrote code that was used to automate many of the processes that needed to be run in order to implement a predesigned SCAN interface
- Designed a graphical user interface to simplify the work needed to be done by hand when doing the MBIST

# RESEARCH, DECRYPTION OF MISR CIRCUITRY

August 2015 - May 2016

Reverse engineer MISR circuitry for use in solving BIST systems

#### **TECHNICIAN, SOFTWARE ASSISTANT TRIAGE (SWAT)**

August 2015 - February 2016

RESEARCH, CODE BREAKING USING LOGIC CIRCUIT CONCEPTS

January 2015 - August 2015

TECHNICIAN, SERVICE DESK TECHNICIAN, VIRGINIA HOSPITAL CENTER

June 2014 – August 2015

# **PROJECTS**

# **AUTONOMOUS ROVER TRACK CREATION AND FOLLOWER SYSTEM**

Embedded design project which contains two autonomous rovers. One rover maps out a course on a surface while traversing a course, while the second one follows this course and creates a virtual map that is then displayed in a separate graphic user interface.

# **BLUETOOTH PORTABLE SPEAKER**

Uses a Bluetooth audio receiver to communicate with another Bluetooth device, such as a phone, in order to play music through three speakers that are attached to it.

#### **ARDUINO SMART WATCH**

Arduino based smartwatch that implements a Bluetooth module controlled through a phone as well as keeping much of the functionality of most common watches.

# **QUADCOPTER**

Mini FPV quadcopter with a Multi-Wii flight controller

# ACTIVITIES

**RESIDENTIAL ADVISOR, Fall 2015 - Current** 

ECE EMBASSADOR, Spring 2015 - Current

IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS), Fall 2014 - Current

HKN (HETA KAPPA NU), Fall 2014 - Current