

Alden N. Fisher

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EDUCATION:

Purdue University

Undergraduate Major: Electrical Engineering

May 2017

GPA: 3.95/4.00

WORK EXPERIENCE:

Adaptive Radio Electronics and Sensors (ARES) Lab - Research Assistant

October 2016 - Present

- Extracted transfer functions of a reconfigurable filter at various biases using MATLAB and a PNA
- Thermally tested a reconfigurable filter to discover how the transfer function varies as a function of temperature

Harris Corporation, Electronic Systems - RF/Power Engineering Intern

Summer 2016

- Designed a 1 to 2GHz class A power amplifier in Advance Design System (ADS)
- Created PCB layout taking into consideration transmission line constraints using ADS
- Tested the amplifier to validate the transistor's performance at a single frequency

Purdue University, ECE Department - ECE 270, Digital System Design, Teaching Assistant

Fall 2015

- Assisted and taught over 60 students the ideas and the benefits of digital logic devices
- Aided students with digital design principles using HDL with PLDs

Hitachi Automotive - Design Engineering Intern

Summer 2015

- Adjusted the H-bridge configuration to comply with customer specifications
- Measured waveforms of the modified PCBs to validate performance
- Conducted thermal tests for Worst Case Analysis (WCA) correlation using thermocouples

PROJECTS:

Microprocessor Design Project (Universidad Carlos III)

Spring 2016

- Developed a guessing game with a PIC18 microprocessor
- Programmed in embedded C to interface with a matrix keyboard, speakers, and a LED display

LazerCom Boilermake Hackathon Project (placed 4th)

October 2015

- Designed, implemented, and programmed two transceivers using lasers (light pulses)
- Used two Arduino Unos to interface with lasers and photoresistors

Vertically Integrated Projects (VIP) - Electromagnetic Compatibility

Spring 2015

- Performed EMC testing on an audio amplifier I created

LEADERSHIP EXPERIENCES:

Eta Kappa Nu (HKN)

Fall 2016-Present

ECE Student Society (ECESS) - Treasurer, President, Faculty Outreach

Fall 2014-Fall 2016

- Coordinated with companies to set up tech talks focusing on the company's innovations
- Facilitated interactions between faculty and students during a course of nine ECE-focused luncheons

ECE Relay for Life - Team Captain

Spring 2015

- Led a team of ECE students in fundraising over \$2,000 to help fight cancer

Boiler Gold Rush (BGR) - Team Leader

Fall 2014

- Assimilated a group of 15 new students into college life during Purdue's week-long orientation

HONORS & ACTIVITIES:

- Studied abroad in Madrid, Spain and in Merida, Mexico
- Volunteered abroad in Barranquilla, Colombia
- Habitat for Humanity Member

Spring 2016, Summer 2012

Summer 2014

Fall 2014-Present

RELEVANT SKILLS:

Technical Skills: logic ICs, soldering (SMD), CAN protocol

Languages/Computer Skills: C, MATLAB, ADS, JAVA, embedded C, assembly, SPICE, Arduino