# Thomas J. Stepp

tom-stepp.net 630-842-1284 steppt@purdue.edu

#### **EDUCATION**

Purdue University May 2017

Bachelor of Science in Electrical Engineering Major GPA: 3.6 / 4.0

Study Abroad: Universidad Carlos III de Madrid

Spring 2016

Courses: Skills:

Software Engineering Tools Microprocessor Systems C / C++ Matlab Advanced C Programming Algorithms & Data Structures Java Python Object-Oriented Programming Feedback System Design Bash Tcl

# PROFESSIONAL EXPERIENCE

# **Network Engineering Intern @ Facebook**

Summer 2016

- Created scripts for automation of network switch testing with Tcl and Ixia hardware API
- Developed driver for IC chip with C++ to improve Wedge100 switch function and reliability
- Assisted with switch setup and procedure standards to maximize the team's productivity

# Systems Engineering Intern @ GE Aviation

Summer 2015

- Produced Matlab software tools to automate test validation for LEAP and Passport 20 engines
- Supported certification for pressure cycling tests and fire tests to meet FAA regulations
- Strengthened user interface for the GE Intern Onboarding app on Android OS

# Data Analyst Consultant @ McDonald's

Summer 2014

- Collaborated with team for testing and issue resolution of the e-Procurement website
- Created a process to standardize the financial coding of 20,000 products sold on the website
- Developed reporting to show purchasing trend differences between the new and old systems

#### **DESIGN PROJECTS**

Pebble Watch Faces Summer 2016

- Developed Facebook themed pebble watch face to display company values for employees
- Displayed battery percentage and outside temperature below the time display

The Useless Box Fall 2015

- Created embedded C algorithm to close box and perform tasks with a combination of switches
- Designed PCB and interfaced motors, servos, and switches with the microprocessor

# **Floyd-Steinberg Dithering**

Fall 2015

- Programmed image conversion algorithm for converting between 16-bit and 24-bit images
- Used dithering algorithm as a means of diffusing pixel error to maintain image quality

#### **Electromagnetic Compatibility**

Spring 2015

- Built and tested PWM audio amplifier for radiated and conducted emissions
- Designed amplifier to meet emissions regulations and standards

# Mars Rover Project

Programmed drive system and sensors with Arduino for Mars Rover Education project

Maintained website with HTML and CSS for Aerospace Engineering Education team

#### LEADERSHIP EXPERIENCE

# Faculty Committee Chair, ECE Student Society

Fall 2016

• Connecting students and faculty to create a better learning environment for all ECE students

# Publicity Committee Chair, ECE Student Society

Spring & Fall 2015

Spring & Fall 2014

- Planned events to develop strong faculty to student relations in the ECE community
- Publicized all events to meet Purdue University regulations and drive student attendance

#### Eagle Scout, Boy Scouts of America

January 2012

- Devoted over 200 hours to a service project with Sgt. Tommy's Kids Foundation
  - Executed workshop to teach essential outdoor skills including igloo camping and orienteering