# Kyle R. Hess

4327 8th Ave NE Apt B302 Seattle, WA 98105 | 360-550-2362 | hessk2@uw.edu

## Education

## UNIVERSITY OF WASHINGTON, SEATTLE | GPA: 3.6

- · Bachelor of Science Electrical Engineering (Anticipated 08/2017)
  - Degree concentrations: Power Electronics and Large Scale Power Systems
- · Relevant Coursework:
  - · Power Electronics Design, Electric Drives, Energy System Analysis, Applied Electromagnetics
  - · Undergraduate research Special projects: Methods of 3-D Position Tracking

#### OLYMPIC COLLEGE, BREMERTON

· Associate of Science Pre-Engineering (Completed 09/2015), Honor graduate/Dean's List

## Skills & Abilities

- Electronics: Proficient with circuit and PCB design, prototyping, and construction/soldering techniques
- · Lab Equipment: Oscilloscopes(DSOs)/function generators, DMMs and handheld RF analyzers
- · Software: Autodesk Eagle, LTSpice, NI Multisim, Microsoft Office Suite, AutoCAD, PLECS, Revit
- · Programming: MATLAB, Arduino, Java, and Python

## **Projects**

- · Constructed Brushless DC Motor Controller (4/2017)
  - · Designed driver circuit and closed loop speed and position control for a 48V 4A motor
  - · Only project group to receive full credit and win EEIC poster contest
  - · Consolidated final design onto PCB for inverted pendulum project
- Designed and manufactured an LED matrix display (11/2016):
  - · Designed circuit and PCB layout using EAGLE with the desired SMD package types
  - · Ordered professionally fabricated boards of my design and soldered components to the boards
  - · Programmed an Atmel microcontroller to control the display via serial communication
- Built low-power regulated DC-DC & AC-DC converters (9/2016):
  - · Simulated boost/buck converters with Multisim to determine exact component values
  - · Calculated parameters for a type 2 K-factor controller with MATLAB
  - · Built prototypes on a breadboard for testing, soldered final design on perf-board
- Designed an analog LED VU-meter (2/2016):
  - · Employed op-amps as comparators to measure the level of an input audio signal
  - · I sketched the basic circuit design, calculated component values, and finished the PCB layout with EAGLE

## Work Experience

## INTERN | BCE ENGINEERS INC. | FIFE, WA | 6/2016 - 9/2016

- · Revised building electrical plans to NEC specifications using AutoCAD
- · Designed indoor/outdoor lighting layouts in accordance with IES recommendations
- · Collaborated with building engineers and architects to ensure client expectations were met

APPRENTICE | CLASSIC CERAMIC TILE INC. | BAINBRIDGE ISLAND, WA | 6/2011 - 9/2013