

Kyle R. Hess

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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, KiCad
- **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