

# Noah Bergman

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(651)-247-7668

## Education

### Bachelors in Electrical Engineering

Iowa State University of Science and Technology

Ames, IA

2011 - 2016

## Relevant Work Experience

### Altec Industries

Controls Engineer

St. Joseph, MO

2016 - Present

- Lead electrical designer for multiple projects
- High-speed circuit design for eMMC, USB 2.0, and SPI technology
- Experience with CAN, CCP, Matlab Simulink, Solidworks, Altium, CANape
- Designed product to exceed vibration, thermal, and EMI/EMC specs

### Altec Industries

Electronics Manufacturing Engineer

St. Joseph, MO

2015

- Identified more than \$70,000 in annual savings while leading monthly cost events
- Designed manufacturing layout for SMT equipment

### ETG Electronics Shop

Shop Assistant

Ames, IA

2014 - 2016

- Developed and tested labs for TI's TIVA C series ARM-M4 processor in C
- Designed remote datalogging device with LCD UI, navigation buttons, and ADC module

## Project Experience

### Power Distribution Module

- Lead electrical engineer for module controlling 15 relays and 2400W
- EMI/EMC, vibration, and thermal for ISO and EN compliance.
- Worked with CM's to meet budget goals and improve manufacturability
- Extensive use of CANape and CANKing during testing and debugging
- Developed low-voltage relay disconnect and IO monitoring circuitry

Altec Industries

2017

### Heads - Up - Display for a Manufacturing Microscope

- Designed optical system and circuit board to integrate with DLP Display
- Worked with ARM-M4 and MSP430 to create user interface
- Experience with HDMI and other Digital Video protocols

Honeywell - Senior Design

2015 - 2016

### Capacitive - Touch Rubik's Cube (LED Cube)

- MSP432 running TI-RTOS, 36 TLCs, IMU, Bluetooth
- Custom designed capacitive touch zones for 2D scrolling
- Collaborative software development in C/C++
- I2C, SPI, USB 2.0 connected peripheral devices and debugging applications

Personal

2014-2015

## Extracurricular

### Kansas City Climbing Community

Treasurer(Current)

2016 - Present

### Engineers for a Sustainable World (ESW)

President, Vice President, VP of International Projects

2012 - 2016

### Institute for Electrical and Electronics Engineers (IEEE)

Vice President, Project Chair, Web Media Chair, Project Leader

2012 - 2016

## Skills

**Proficient in:** C, MATLAB Scripts, Visual Basic, HTML,  $\LaTeX$

**Basic Knowledge in:** C++, Python, Verilog HDL

**Software:** MATLAB Simulink, Solidworks, AutoCAD, Altium, KiCad, Eagle, Multisim, Code Composer Studio, Visual Studio, Git, SVN, Linux, CANape, CANKing

**Hardware Topologies:** Microchip DSPic series, TI MSP430 and CC3200, SI Labs Happy and Zero Gecko

**Hobbies:** Cheese Making, Rock Climbing, Hiking, Backyard Catapults, and Board Games