# BENJAMIN GERBER

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## **SUMMARY**

Determined worker with internship experience at successful companies who strives to learn as much as possible. Desire an internship at a medical device company to apply knowledge of electronics in the medical field.

#### **EDUCATION**

North Dakota State University, Fargo, ND

Bachelor of Science Electrical Engineering Expected Dec. 2018

GPA: 3.44, Deans List (2 semesters)

**Relevant Coursework:** 

Electronics I/II Senior Design I, II Digital Design Undergraduate Research - Biomedical

## TECHNICAL SKILLS

Hardware: RF Design, Digital & Analog Circuit Design, PCB Design, Filter Design

Software: Altium Designer, Matlab, DesignSpark, Kicad, Arduino, Excel, Linux, Solidworks

*Programming:* C, C++, Powershell, Bash, Basic Assembly Language, TCL, Python

Electrical: Soldering, Circuit Design/Analysis, Signal Analysis, Sensors, EOG, ECG, EMG

# **ENGINEERING PROJECTS**

# Senior Design: REM Sleep Cycle Monitor

2017-present

- Designing circuit to capture REM cycles through EOG signals and relaying them over bluetooth
- Inventing a sensor headband with mounting for a 3D printed enclosure with PCB design
- Creating an android app to analyze sleep patterns and developing algorithms for future features

## **Biomedical Pressure Calibration Research**

2015-2016

- Used Matlab skills and analysis to find internal pressure correlations
- Collaborated with outside schools in data acquisition and decoding

#### **INTERNSHIPS**

## Graco Inc, Anoka, Minnesota

Electrical Engineer Intern

Summer 2017

- Designed and prototyped a guided wave radar EM medium sensor leading to possible future patent
- Performed hardware test engineering on upcoming project to solve performance issues
- Proved troubleshooting skills in finding and solving bugs with sonar and RF sensors, and small power leaks

## HGST, A Western Digital Company, Rochester, Minnesota

System Integration Technology Lab Intern

Summer & Fall 2016

- Applied knowledge of scripting to automate debugging processes saving over one thousand manhours a year
- Exercised troubleshooting skill to repair systems, avoiding cost of repairs and increasing efficiency in team
  - Led small team in testing of NVMe drives and educated team on procedures and tools of operation
  - Educated myself about new topics in order to teach others and increase team knowledge

#### **ACTIVITIES**

Air Force Reserve Officer Training Corps, Fargo, ND Arnold Air Society Member, Fargo, ND

2014-2015

2014-2015

REFERENCES AVAILABLE UPON REQUEST