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## **SUMMARY**

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A fifth year Mechanical Engineering student specializing in computer aided design and modeling, robotics design and programming, and acoustic design seeking a full-time position in 2022. Open to relocation.

## **EDUCATION**

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**Michigan Technological University**  
**B.S. Mechanical Engineering** | Music Composition Minor  
**GPA: 3.80**

**Houghton, MI**  
**Expected Graduation: December 2021**

## **COMPUTER and TECHNICAL SKILLS**

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- Autodesk Inventor
- Siemens NX
- Solidworks
- SAP
- Microsoft Excel
- FDM 3D Printing
- SLS 3D Printing
- CNC Milling
- MATLAB
- Minitab
- Companion
- Robotic Arm Programming

## **PROJECT EXPERIENCE**

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### **Multiplanetary Innovations Enterprise at Michigan Tech – NASA Lunabotics Competition** **Fall 2019 – Present**

- Current project: designing, funding, and constructing a robot for the 2021 NASA Lunabotics Competition
- Uses programs such as NX, AMESim, and Hyperworks to design 3D design models and simulate prototypes
- Manufacture, 3D print, and construct components to build robot
- Systems Engineering Paper: Technical writing and documentation

### **Portable Tomb Speaker - Acoustics and Noise Control Class Project** **Spring 2021**

- Worked with an archaeologist based in the United Kingdom to design and construct a speaker and microphone system for measuring reverberation time in Etruscan tombs; measured using sine sweep and two microphones
- Specific role was choosing which components to buy and building the speaker itself

### **Eagle Scout Project – LittleFreeLibrary Construction** **Spring – Summer 2017**

- Used Autodesk Inventor to draft multiple LittleFreeLibrary designs and had a church board vote on preference
- Managed an appropriate budget for supplies and materials and ran a local book drive for donations
- Coordinated with city offices to follow safe and legal digging procedures

## **WORK HISTORY**

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### **Kimberly-Clark** **Ogden, UT** **Mechanical Engineering Co-op** **Fall 2020**

- Forming Chamber Access – Worked with mentor, technicians, and Solidworks to design a new panel access for machine operators that is both easier and safer to use
- SLS 3D Printing – Designed parts using Solidworks and printed them using 3D Sprint and an SLS printer
- Cart Tablet Mount – Designed and printed a tablet mount for a cart – utilized by quality technicians
- Care Package Management – Organized inventory and created work orders using SAP

### **Integer** **Minneapolis, MN** **Manufacturing Engineering Intern** **Summer 2021**

- Created an Excel database to sort expired equipment for removal and salvaging (saved an estimated \$180k USD)
- Programmed robotic arms for hydraulic presses for time trials and manufacturing proof of concepts

## **LEADERSHIP**

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### **Treasurer, Smash Club at Michigan Tech** **October 2018 – April 2021**

- Keeps track of club inventory, funding, and budget
- Regularly uses Excel and Google Sheets to organize information

### **Co-Founder, Video Game Jazz Ensemble** **November 2019 – Present**

- Created a student-lead ensemble dedicated to playing music from video games and other popular media

## **EXTRA-CURRICULAR INVOLEMENT and INTERESTS**

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- **Visual and Performing Arts at MTU** – Pep Band, Concert Band, Jazz Band, Multi-instrumentalist (piano, percussion, guitar, saxophone)
- **Music Composition and Production** – Proficient with music programs/interfaces: MuseScore, Sibelius, Cockos REAPER