

Lindsey Tomasini (She/Her/Hers)

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Education

COLLEGE STUDENT | CURRENT | OREGON STATE UNIVERSITY

- Major: Electrical and Computer Engineering (ECE)
- Expected Graduation Date: June 2021
- Related coursework: Electrical Fundamentals, Introductory CS and ECE courses, Electronics, Signals and Systems, Junior Design, Electric and Magnetic Fields, Transmission Lines, Power Electronics, Dynamics of Electromechanical Energy Conversion, Electromechanical Energy Conversion, Electric and Hybrid Vehicles, Sensors, Linear Algebra, and Senior Design.
- Air Force Reserve Officer Training Corps (AFROTC) Positions:
 - Accountability Officer: Took attendance of entire wing, about 100 cadets, in emergency and practice situations.
 - Arnold Air Society (AAS) Professional Development Manager: AAS are a group of cadets who do volunteer work. Assisted in organizing guest speakers and professional opportunities for this group.
 - Assistant Audio/Visual Officer: Captured and edited photos and videos of events and special guests.

Skills & Abilities

SOFT SKILLS

-Organization	-Communication	-Leadership
-Open-mindedness	-Teamwork	-Problem Solving
-Adaptability	-Willingness to learn	

HARD SKILLS

-MATLAB	-Simulink	-C/C++
-Atmel Studio	-Photoshop	-LTspice

Minor (Basics):

-Auto CAD	-Inkscape	-Cura
-Fusion 360	-Eagle	-ModelSim
-Wireshark	-Python	

Experience

RESEARCH

- Information Processing Group (8/18 – present):

I participate in undergraduate research with Dr. Mathews' Information Processing Group (IPG) on neural prosthesis and signal processing. The specific project I am working on is the Prosthetic Hand. I have also worked on a Joint Angle Sensor using two accelerometers to determine position.

WORK

- TekBot Worker (1/19 – present):

A store that sells hardware, provides hardware and software help, and creates the kits for students in EECS classes at Oregon State. Laser cutting and 3D printing are available.

- Classroom Access Assistant (1/19 – 1/20):
Includes helping blind, partially blind, or physically disabled students. Required to take notes on anything written and tell the student any visual cues that will help them. Requires being constantly attentive and flexible since things happen quickly in a class made for students who can see.

Projects

SURFACE MOUNTED POWER SUPPLY

- Hand built a surface mounted power supply. Can supply 3 or 5V.

PERSISTENCE OF VISION WAND

- Arduino controlled LED's that can display a 7+ word when moved quickly back and forth. Used an MPU-6050.

AUDIO BAND VISUALIZER

- Takes in an audio signal and displays the strength on an LED band.

BOMBUS: THE BOX THAT BUZZES

- Junior Design project to create a music box with recorded and programmable songs. Used an FPGA chip and an FFT.

PROSTHETIC HAND

- A durable prosthetic hand that responds to Electromyography (EMG). Has pressure sensors in each finger and an accelerometer in the hand. Uses five stepper motors controlled by an Arduino. EMG collected using EMG sensors connected to an OpenBCI board. The hand uses the current decoder developed by the PhD students.