

Continuation/Research Progression Projects Form (7)

Required for projects that are a continuation/progression in the same field of study as a previous project. This form must be accompanied by the previous year's abstract and Research Plan/Project Summary.

Student's Name(s) Jeron Osguthorpe

To be completed by Student Researcher: List all components of the current project that make it new and different from previous research. The information must be on the form; use an additional form for previous year and earlier projects.

Components	Current Research Project	Previous Research Project: Year: <small>2021-2022</small>
1. Title	Advanced Customizable Open Source Affordable Prosthetic Hand with tensioner and computer based system.	Building a Prosthetic Hand With Microcomputers and Sensors
2. Change in goal/purpose/objective	Create an affordable prosthetic hand that can complete more functions, has more customizability and is functioning much smoother. Might have learning code to create a learning system. Can be changed to have more settings.	Build a prosthetic hand that can complete more realistic features, have a complete redesign similar to an actual hand, and to be able to be more controlled and have touch sensors all while maintaining an affordable price.
3. Changes in methodology	Redesign the hand to fit the components necessary without destroying the structure. Create a slimmer system, smoother system, and a more customizable system to complete functions similar to higher priced prosthetics.	Completely new redesign of the actual hand itself. New code to allow for more sensors and more intelligence to the code for it to be able to move itself.
4. Variable studied	Amount of functions able to complete, as well as the customizability and how much the hand is able to handle before it cannot do anything else.	Effect on people who need prosthetics and the functions that are similar to a normal hands functions. The price is maintained. Strong form.
5. Additional changes	New parts, new code, new AI learning system. New sensors.	New parts for the project. New code.

Attached are:

☒ Abstract and Research Plan/Project Summary, Year 2021-2022

I hereby certify that the above information is correct and that the current year Abstract & Certification and project display board properly reflect work done only in the current year.

Jeron Osguthorpe

Student's Printed Name(s)

Signature

5/16/2022

Date of Signature (mm/dd/yy)