

ABSTRACT

The goal of this project is to design and fabricate a simple means to statically balance a prosthetic arm throughout a natural range of motion such that the prosthesis feels lighter to the user. Prosthetic arms use advanced motors, gears, and other actuation methods to provide the necessary degrees of freedom, but these additional components cause the prosthetic to exceed the weight of a natural arm. Thus, this project aims to use static balancing techniques to counter the additional weight of the prosthesis. Also, an embedded compliant mechanism will be used to reduce product complexity and cost.

For additional information please contact our sponsor:

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