

1. What specific biological structures found in marine life did you observe that could be translated into soft robotic wearable design?

In the REEF presentation they inspired me with several facts and concepts relating to our track. There are several creatures which have similar structures and we have in soft robotics and wearable technology. Nature is the basis of engineering and it is the reason engineering, wearables, and soft robotics exists. In the presentation they gave very good examples of some creatures which have robotic look-alikes. For example, there was a video of an octopus and it described the suction cups and the functionality of it. As far as real applications go, suction cups can be used as refrigerator doors as they share the same mechanism. Suction cups trap air inside of them therefore making it hard to pull due to the compact air. Additionally, in the presentation the movement of eels and octopi and they represent certain movements in soft robotics. They have a large range of motion while not having any skeletal structure, similar to soft robots. The bendability of these organisms are unique and very adaptable and that's the main reason they are useful in soft robotics. Also, different kinds of jellyfish are also mimicked in soft robotics. Their motion through the expansion and contraction of muscles is also adapted in soft robotics. These organisms are very unique in their own way and their structure gives us a lead in engineering and has evolved soft robotics as a whole.