KOMO: UW grad develops 'human tentacle' to replace arm

A recent University of Washington graduate has generated a worldwide buzz by developing a prosthetic arm for amputees that looks and functions like an octopus tentacle instead of a human hand.

The developer, Kaylene Kau, a graduate of the UW's Industrial Design Department, already is becoming well-known via numerous technology-based websites that have featured her work prominently.

Kau has also appeared on CNN and other broadcast outlets to talk about her groundbreaking invention - in the process exploding traditional ideas of how a prosthetic limb should work.

"Some people say it looks really creepy, some people say it looks really awesome," she said in an interview with KOMO News. "It's been a challenge seeing what people think."

"It looks a bit like a tentacle, I have to admit," she adds.

Kau's arm is not designed to work like a hand. Instead it works like an appendage that assists the good arm.

The tentacle can grasp a variety of different everyday objects.

A simple motor drives two cables inside the tentacle, and the wearer controls it with a pair of switches on the upper section.

The user simply puts the tentacle in place, hits the switch, and it curls around whatever you might want to carry. The other switch unfurls the arm.

"The basic functions it does are holding things down, grasping and gripping," Kau says. "You can control the amount of curl it does, and it can curl around quite a few objects."

Designed for a class project while getting her degree, the tentacle arm is not only functional but would be a lot cheaper to produce - making it available to many more amputees.

But will amputees accept it?

"There's people that think, 'That is just too creepy to be on a human.' And then you've got the people who really want it because it is that creepy and that strange," she says.

Kau hopes that the appearance of prosthetic tentacle can be made to look less forbidding, allowing it to become more widely accepted - because the need is there and is likely to grow, she says.

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