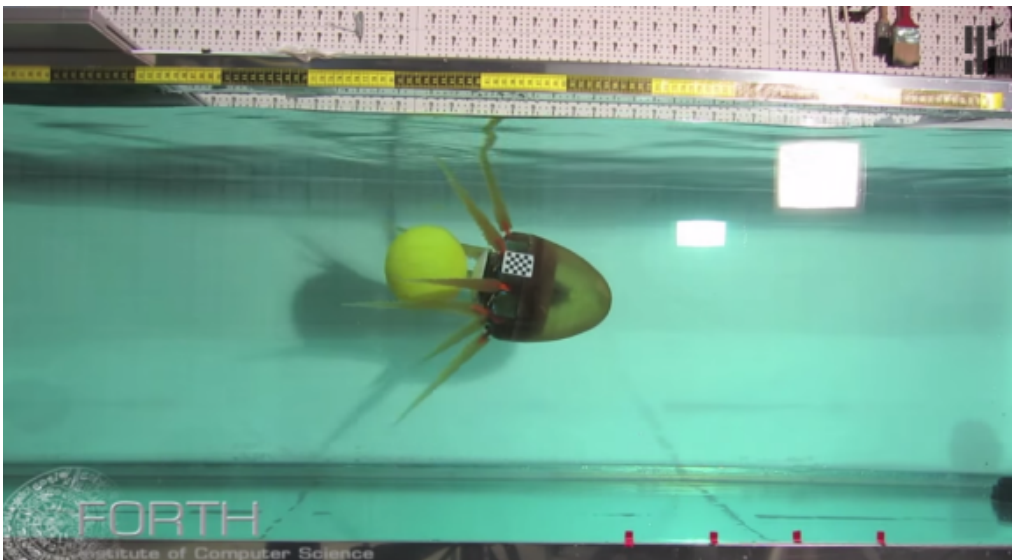- [Home](#)
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Robotic Octopus to Take Over the Seas

October 3, 2014 By [James Hobson](#) [12 Comments](#)

Much of robotics has been advanced by recreating animals movements – Why reinvent the wheel when nature got it right first? But have you seen many aquatic creatures movements re-imagined with mechanical linkages? The Foundation for Research and Technology-Hellas (FORTH) has recently [presented their robotic octopus](#) at the International Conference on Intelligent Robots and Systems.

The eight armed (or is it legged?) *roboctopus* was based on of a real octopus which have a really cool method of propulsion which allows them to move at speeds of up to 40km/h. The researchers in Greece created slim silicon arms to recreate this movement, allowing their robot to propel itself at speeds of around 10cm/s — after adding webs to the arms, they were able to almost double its top speed to 18cm/s, or one-half its body length per second.

The cool thing about the bot is that other marine wild-life seem relatively unperturbed by it, which could open up many possibilities in underwater research!

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Between [robotic kangaroos](#), [rats](#), [red snappers](#) and [even elephants](#) we'll be able to have a robotic zoo in no time!

[via [TechPlus24](#)]

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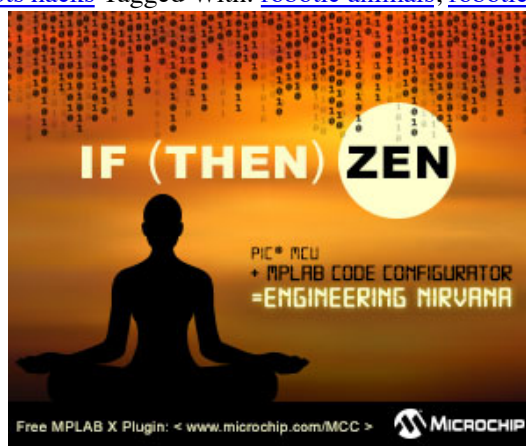
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Comments

1. *Dax* says:
   [October 3, 2014 at 4:04 pm](#)

   After a bit of unit conversion, it does 0.7 kph, which is rubbish compared to 40 kph.

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   - *dsblackout* says:
     [October 3, 2014 at 5:05 pm](#)

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But amazing for a robotic imitation that can't *quite* imitate the original properly. Tentacles are a LITTLE bit hard to imitate in robots, what with the infinite degree of flexibility and all.

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2. *NotArduino* says:
   October 3, 2014 at 4:39 pm

   Yes, this will definitely take over the seas.

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3. *OneShotWillie* says:
   October 3, 2014 at 6:17 pm

   I, for one, welcome our new overlords…

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4. *Hirudinea* says:
   October 3, 2014 at 7:16 pm

   Greeks invented a robotic octopus? Did they eat it when they were done? Anyway it looks like it swims more like a jellyfish, why not forget the tentacles and just go for a full "cowl" or whatever the hell you call a jellyfish head.

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   ○ *Royell* says:
     October 4, 2014 at 9:37 pm

     Bell*

     Reply Report comment
   ○ *Lampros* says:
     October 6, 2014 at 8:25 am

     As a biologist, i couldn't disagree more: Jellyfish swim with contractions of the bell (as Royell very correctly remarked) or as others call it: hood. Cephalopods on the other side, display a much wider range of motion modes. The ones displayed here, are motions performed mainly by the tentacles (an organ homologous to the foot of a gastropod (snail). Other modes of motion involve the contraction of the mantle which might initially look like the motion of the jellyfish but is in fact a more involved and much faster mode of motion.

     Reply Report comment

5. *Jerzee* says:
   October 3, 2014 at 11:43 pm

   Being a swimmer and looking at the motion in the footage provided I wonder why they didn't incorporate a one-way water inlet valve. In strokes life the a portion of your forward motion is taken up by the recoil phase of the stroke, the same goes for the way the footage in this video shows its swim pattern. A simple oneway valve would reduce the drag caused by turbulance and resistance of the water refilling the expanding webbing of the tenticles. I would not be suprised if they could double their current speed and reduce energy consumption by including inlet valves.

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6. *Thinkerer* says:
   October 4, 2014 at 7:56 am

   Festo has jellyfish like this they bring to trade shows – the tentacles aren't independent but it's a charming display.

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http://scienceblogs.com/zooillogix/2008/04/24/robotic-jellyfish-that-move-au/

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7. *heatgap* says:
   October 4, 2014 at 8:19 am

   Ok yeah I'm definitely getting a creepy vide from this.

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   - *heatgap* says:
     October 4, 2014 at 8:20 am
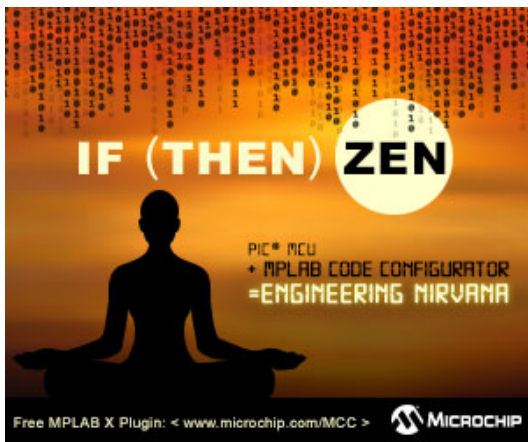
     vibe*

     Reply Report comment
8. *Gerard* says:
   October 7, 2014 at 8:08 am

   So remind me, what eats squid? Blue sharks eat squit https://www.youtube.com/watch?v=OlgsvnvcbC8

   Reply Report comment

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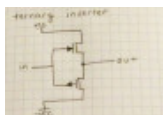Search this website …   Search

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