ICT-2007.8.5
Embodied Intelligence
www.embodiedintelligence.eu

Future and Emerging Technologies

OCTOPUS

www.octopusproject.eu

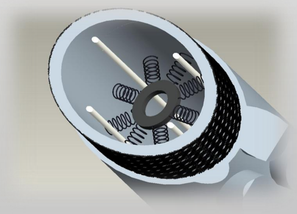
Novel Design Principles and Technologies for a New Generation of High Dexterity Soft-bodied Robots Inspired by the Morphology and Behaviour of the Octopus

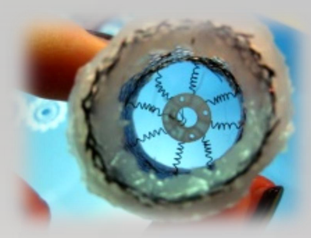

Credit : Massimo Brega – The LightHouse

The octopus as a paradigm for Embodied Intelligence and as source of inspiration for Soft Robotics

- The octopus has no rigid structures and it can squeeze into small apertures
- The octopus peculiar muscular structure (*muscular hydrostat*) provides it with high strength (up to 40N) in grasping
- The octopus shows rich behaviour, learning capability, memory

The OCTOPUS project aims at understanding the key principles of the octopus body and brain by building a soft 8-arm robot, able to move in water, to elongate its arms, to reach and grasp, and to locomote.



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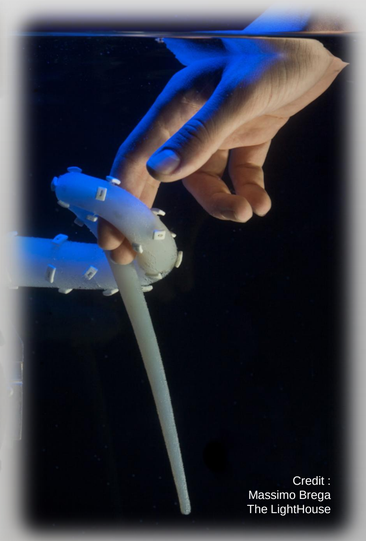
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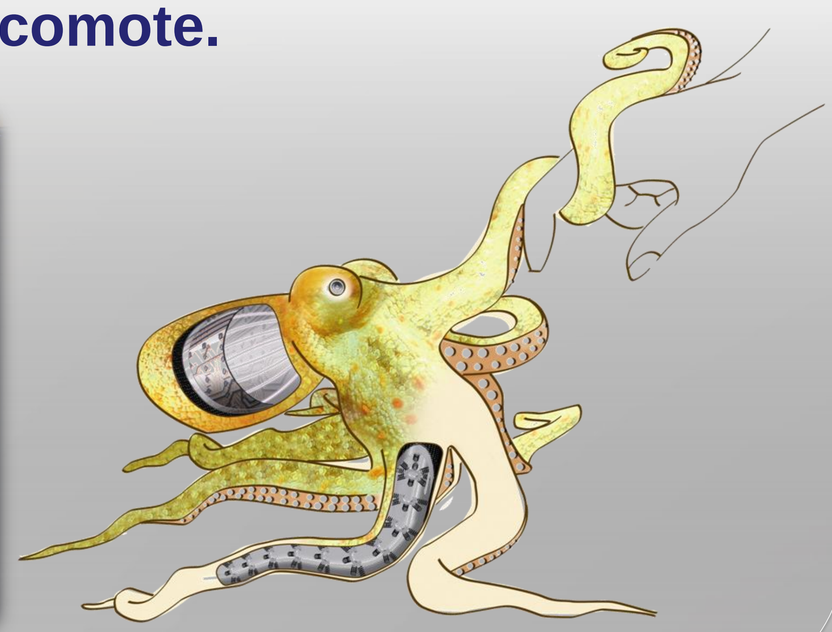

The OCTOPUS Integrating Project

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