

Combining Soft Robotics and Deep Learning in Robots Inspired by Bats

The biosonar system of bats is an example for a biological sensory system that enables dexterous autonomy in complex natural environments. The capabilities of the animals could inspire new solutions to critical problems in creating bioinspired robots that could navigate in natural environment with the same high levels of complexity as the habitats of bats. In particular, bats can provide insights into how to encode the relevant sensory information, extraction of patterns that are hidden in complex data, and the integration of sensing and actuation.