

We can learn from the evolution in moths for securing autonomous vehicles

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William J. Cromartie reviewed a book entitled “Underbug” (1). Termites teach us about technology (1). Similarly, I was surprised at the evolution in moths (2). During the evolution in moths, moths create anti-bat sensory illusions against ultrasonic sensors of bats. The bat sensor system is equivalent to the ultrasonic sensor in autonomous vehicles. The evolution in moths is called spoofing against ultrasonic sensors in the autonomous vehicle technology. In other words, moths have gained ability to spoof ultrasonic radars of bats. We should prepare for such potential security vulnerability in order to make autonomous vehicles safer. We can learn from the evolution in moths for securing autonomous vehicles.

References:

1. William J. Cromartie, Underbug, Science 07 Sep 2018: Vol. 361, Issue 6406, pp. 966-971
2. Juliette J. Rubin et al., The evolution of anti-bat sensory illusions in moths, Science Advances 04 Jul 2018: Vol. 4, no. 7, eaar7428