

November 12, 2016

Spider Hearing and Robot Senses

Quest Through the Archives

1. Search for an article discussing a prediction about robotics that has not happened yet. Explain the prediction.
2. What is the earliest *Science News* article you can find that reports on programming a robot? How does this article compare with the programming developments and challenges described in the article "Robot awakening"?
3. Find another article describing an example of biomimicry. What property or function of the organism was mimicked? What design inspiration was created?

Responses to Quest Through the Archives

1. Search for an article discussing a prediction about robots that has not happened yet. Explain the prediction.

Possible student response: *Even though the Sputnik mission was the beginning of the robotic satellite era, it didn't launch human colonization of the moon or other planets, as many sources had predicted.*

www.sciencenews.org/article/sputnik-50

2. What is the earliest *Science News* article you can find that reports on programming a robot? How does this article compare with the programming developments and challenges described in the article "Robot awakening"?

Possible student response: *In 1937, a robot solves nine linear algebraic equations simultaneously. A set of tilting plates and a mechanical mechanism allow for the quick manipulation of variables.*

www.sciencenews.org/sites/default/files/calculator.pdf

3. Find another article describing an example of biomimicry. What property or function of the organism was mimicked? What design inspiration was created?

Possible student response: *"Chemistry au naturel" highlights how efficient cellular reactions have inspired unique methods for laboratory molecular synthesis.*

www.sciencenews.org/article/chemistry-au-naturel