

# Help Train Space Robots to Detect Signs of Microbial Life



**Stromatolite**



**Biovermiculation**



**Soil Crust**

In our search for life beyond Earth, JPL is teaching robots to detect signs of microbial life in images. In order to train and validate our system, we are seeking out as many examples from Earth as we can find - but we can't do this alone! [Here is how you can contribute:](#)

1. Take images of visual signs of microbial life. This includes stromatolites, biovermiculation, biological soil crust, and any other patterns created by microbial activity. Write down details including the exact location and distance from your camera to the subject.
2. Upload images to <https://pearl.jpl.nasa.gov/> and use the site's annotation tool to outline the interesting patterns in the image



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Pattern Extraction for Autonomous  
Recognition of Life (PEARL) is a  
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