

Exploration of Mars (08)  
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## A NEW GLOBOSE MARS EXPLORATION ROBOT BASED ON ACTION CONTROL TECHNOLOGY

### **Abstract**

Mars and deep space exploration are becoming hot topic and potential task for expanding human living space in the future. More and more researchers and scientists are looking for the efficient way to control a robot on the Mars or in deep space exploration. In this article, we will demonstrate a novel robot with globose shape and two or more arms, which is able to move easily on the surface of the Mars and fulfill some operations. As we known, the traditional land rover faces difficult to roll over the rock and soft ground. The globose vehicle plays easily along the route. On the other hand, the arms inside the body can stretch out and be controlled to collect samples or assistant to control its body, like a crab. The basic idea of globose robot is the spherical body design and arm control. We are going to use human action senses technique and generate control signal for remote control of robot movement and arm operation.