NASA needs you to help develop a digging robot on ... The Moon

The robot called NASA's RASSOR is designed to dig under the surface of 'Sister Hang' in the near future.

A new era of science and exploration of the Moon is about to begin, but in order to bring about the best results, NASA needs to have all the right technology, ready to roll out when needed. One of the devices that NASA wants to send to the Moon is a digging robot. The agency achieved its initial goals when it successfully developed a robot called RASSO (Regolith Advanced Surface Systems Operations Robot) and is currently conducting experiments on various hardware versions of the robot.

But NASA couldn't do it alone, and they called for help in designing a RASSOR robot: its mineral collecting unit.

We've all seen videos of the Moon mission, which is a dusty place. Collecting materials from the surface is further complicated by the moon's low gravity, and whatever we send there needs to be light enough to be carried by rockets.

A large, heavy robot that can easily be excavated, but cannot be brought to the surface of the Moon without certain problems. So the solution is lightweight machines, and that means NASA has to have new solutions. RASSOR needs to do well with the work goals, must be able to dig, and must not weigh more than 1 ton.

" *With RASSOR, we no longer have to care about the weight of the robot anymore. We can fully excavate the Face or Mars with just a really light robot* " - Jason Schuler of NASA said. " *RASSOR has both a excavation and transport function, but we want to improve its design* ."

This robot will dig the soil and bring the soil to another location. This process needs to be as efficient as possible, which is why NASA needs you. According to NASA, the current container of RASSOR is hollow cylinders placed at the ends of robots, with excavators placed around the circumference of the cylinders. The robot will dig in opposite directions to balance the digging force and make digging easier.

Hoping to further improve the ability to dig, the "Bucket Drum" design challenge for NASA's RASSOR is currently taking the "exam". The agency requires 3D models of the new design that meet NASA standards, including the ability to fill containers at least 50% before being poured.

If you are going to participate, remember the April 20 deadline.

Reference: BGR