

Main Idea: 3D-Printed Autonomous Robots clean solar panels in the desert(or anywhere)

- **Problem:** Outdoor Solar panels get covered in fine dust, pollen, bird droppings and dirt which blocks incoming solar energy and reduces their efficiency. Furthermore, improper cleaning can scratch and scuff the surface of the solar panels which *permanently* reduces their efficiency.
- **Solution:** Autonomous robots that carry their own deionized water and clean the solar panels continuously. Modern solar installations are so large that by the time a robot has completed a single cleaning pass, the first panels that were cleaned are already dusty once again. Therefore the robots never stop cleaning. Furthermore, clean solar panels produce more power, these robots will pay for themselves in additional power production vs non-cleaned solar panels.