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Creating INDRO, the tallest humanoid robot of India and further developing humanoid robots for various sectors in India**Santosh Vasudeo Hulawale**

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INDRO is an autonomous robot was made inside a house with easily available low-cost material like aluminum, wood, cardboard, plastic etc., so to be very practical it cannot be used for security or defense as of now. But it can be certainly used for light weight tasks like entertainment, education and a few house-hold works. INDRO can carry almost 150 kilograms of payload on his platform under the knee in case it is required for an event. When INDRO was introduced to the press in July 2016 it was working on a very basic manual platform. But currently INDRO is being upgraded to an autonomous humanoid robot, where it can perform a certain task by just running the programmed from the laptop which is connected to INDRO. It has a dual operation (manual/automatic) in which it can be controlled both autonomously and manually. INDRO has 31 motors and can perform every action, the human being can do above the knee level, with the same amount of degree of freedom a human has. So, all together INDRO has 29-axis (Joints) which can have the similar degree of freedom of a human being. It can lift objects weighing up to 2 kilograms with its hands and can perform all the actions we human can perform. It is open source so anyone who knows coding can program it according to his or her convenience and make INDRO do a certain task the way they want it to. INDRO will be even further upgraded where it will be fully autonomous and will run on AI platform. INDRO was not built inside a laboratory or a high-end workshop, but instead it was built inside a house with minimal basic tools (set of spanners, scale, hand cutting saw, screw driver, marker, hammer and drill machine).

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