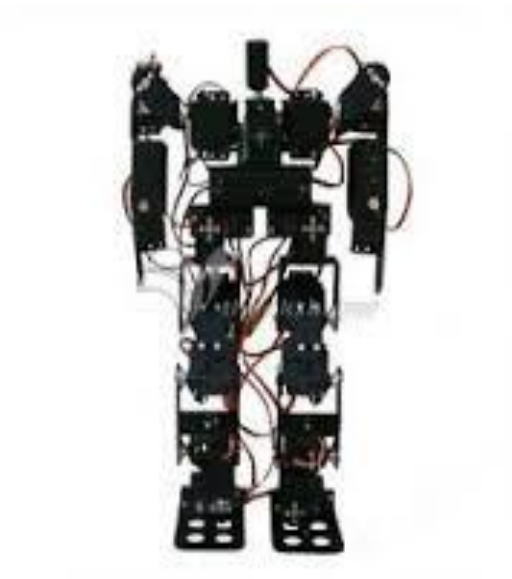


## HUMANIOD ROBOT: BIPED

A humanoid robot is a robot with its body shape built to resemble that of the human body. A humanoid design might be for functional purposes, such as interacting with human tools and environments, for experimental purposes, such as the study of bipedal locomotion, or for other purposes. In general, humanoid robots have a torso, a head, two arms, and two legs, though some forms of humanoid robots may model only part of the body, for example, from the waist up. Some humanoid robots also have heads designed to replicate human facial features such as eyes and mouths. Androids are humanoid robots built to aesthetically resemble humans.



Besides the research, humanoid robots are being developed to perform human tasks like personal assistance, where they should be able to assist the sick and elderly, and dirty or dangerous jobs. Regular jobs like being a receptionist or a worker of an automotive manufacturing line are also suitable for humanoids. In essence, since they can use tools and operate equipment and vehicles designed for the human form, humanoids could theoretically perform any task a human being can, so long as they have the proper software.

The Biped named '**Optimus Prime**' had participated during **The 23<sup>rd</sup> Singapore Robotic Game SRG 2016** which was held in cooperation with IEEE Robotics and Automation Society Singapore Chapter. The event was held from 27 - 28 January 2016 at Tay Eng Soon Convention Centre, ITE Headquarters, Singapore. From the 40 members' team of Panimalar Institute of Technology, around 20 members were presented their various robots during that event.