

The World's First Humanoid Robot Factory



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Technology is moving at an astounding pace and I have been writing for years that robots will become ubiquitous and will enter the mainstream, as AI and robotic engineering converge, leading to a leap in innovative technology that will serve humankind. The science fiction of robots aiding humans in their homes and daily lives is now moving closer to becoming a science reality, through the establishment of the world's first humanoid factory by a firm called Agility Robotics. This will produce robots called 'Digits' that can augment humans in various work settings.

The 'Digit' is a two-legged robot with a torso, arms, sensors, and a head that resembles a cylindrical helmet that can walk, run, climb stairs, crouch, and carry objects up to 18 kg. It can also perceive its surroundings and avoid obstacles, and is powered by a battery that lasts up to four hours and can be recharged wirelessly. The benefits of such technology are immense and the applications are wide and varied.

These robots can assist in tasks that are dangerous, tedious, or require specialized skills, helping to solve numerous workplace problems, with initial designs to be used in sectors such as logistics, distribution and industrial automation, purpose built to function securely among humans. The company is so confident of its design that Digits

will be used by the company to help build the robots alongside human workers, by performing a diverse range of jobs.

The factory named 'RoboFab' will have an annual capacity of 10,000 units and plans to develop the next generation of these Digit robots that will have greater functionality which the firm claims may replace delivery personnel in the future. The factory will be located in Oregon, USA and will employ more than 500 people when fully built. Agility Robotics is the first company to complete development of production prototype humanoid robots and build a factory where it can mass produce them.

It is clear that this is the dawn of a robotic revolution where robotic co-workers will augment human productivity and creativity. I am certain that we will see similar robots being developed in China and other nations which will rapidly bring down the cost and improve the functionality of these robots. Just as we have seen generative AI being used in a wide range of applications this year, I am sure the same will happen with this new robotic technology. It will spur on other innovations and act as a catalyst for further advancement in other areas and applications.

This technology will propagate through all industries as these robots become cheaper and more functional in nature, until similar machines will be found in the home, providing invaluable assistance to us in all spheres of our lives, particularly aiding those that are disabled, old and need extra assistance in their homes in order to lead more fuller lives.

The need for education, training and skills development in this area is clear as another new area of innovation springs forth that will bring about new jobs and opportunities for those willing to skill up and take advantage of being first movers in this area.