# Creepy meets cool in humanoid robots at CES tech show

LAS VEGAS: A lifelike, child-size doll writhed and cried before slightly shocked onlookers snapping smartphone pictures Wednesday at the CES tech show - where the line between cool and slightly disturbing robots can be thin. "Oh! The eyes are very scary," said Marcelo Humerez, an exhibitor from Peru who happened upon the Pedia-Roid, which is designed for medical training, as its eyes went white. But just a few stands away, a humanoid named Ameca got a decidedly different reception, as it chatted with a curious crowd that marvelled at its ability to make a range of stunningly person-like gestures. "Whoa, robot! I didn't expect that when I turned the corner," said Ricky Rivera, an exhibitor with Canada-based tech company Geotab. "But it looks amazing and it tracked me right away." Both reactions were, in some ways, exactly what the makers had been aiming for. Morgan Roe from Britain-based Engineered Arts said the firm created software and technology to make Ameca person-like - though there are limits to how realistic it can be. The Engineered Arts Ameca humanoid robot with artificial intelligence gestures as it is demonstrated during the Consumer Electronics Show. - AFP "We've designed Ameca to be as human-like as possible in movement," he told AFP while standing next to the robot, whose grey face moved and blinked as he spoke. "Humans are so complex, so making a robot exactly like a human is almost impossible," he added. "But if we did that, then you wouldn't be scared of it because you would just assume it was a human." 'A little bit creepy' Just before perfection, though, is a creation that is off in ways that reveal it isn't a living being - it's a concept called "the uncanny valley." "It doesn't quite move like a human, it doesn't quite express itself or emote or talk like a human. That's the uncanny valley, that's the scary bit," said Roe. Yet the slightly frightening aspect of the Pedia-Roid robot was done on purpose, said Yusuke Ishii from Japanese firm tmsuk, which was displaying the doll. "We want to create a realistic scenario, so that's the reason we added some of the scary noises, so it will behave like a child," he said through a translator. The firm's brochure notes the robot can "realistically simulate the jittery movements of a child who is reluctant to receive treatment." At times, the roughly 43-inch (110cm) tall robot moaned and talked, and its legs jerked - though it can also simulate convulsions or the vomiting reflex. Ana Kloar, an exhibitor from Slovenia, watched the Pedia-Roid for a bit and found it pretty cool. "A lot of children are afraid of dentists or doctors in general, and in this way you can practice how to treat them, how to comfort them," she said. And what about those eyes - rolling back into the doll's head or turning white? "They are a little bit creepy, but the doll, it's quite cool," she said. – AFP