Robotics Marvels – NTU Researchers develop unique social and tele-presence robots

Submitted by Karan Gosail on Sat, 01/02/2016 - 04:58

Robotics is turning into an exciting field. Researchers at Nanyang Technological University (NTU Singapore) have developed two of a kind robots- one is a latest humanoid social robot and second one is telepresence robots.

‘Nadine’ is the humanoid robot, which is completely different from conventional robots. She is friendly, greets you back. When next time you will meet her, she will remember the conversations held with her. Her looks are like a human being with soft skin and flowing brunette hair. She sees you in the eye while talking.

One of the most interesting features of Nadine is that she has her own personality, mood and emotions. Developed by Prof Nadia Thalmann, Nadine is powered by intelligent software similar to Apple’s Siri or Microsoft’s Cortana.

Nadine has a lot many uses whether in office as a personal assistant or in home for help. Be young or elderly, she can prove a great to both the age groups. Another one being developed by the researchers is Nadine’s robot-in-arms, EDGAR, which is a tele-presence robot, optimized to project the gestures of its human users.

A user needs to stand in front of a specialized webcam and can control EDGAR remotely from anywhere in the world. The user’s face and expression will be exhibited on the robot’s face in real time. The robot would also mimic person’s upper body movements as well.

It can also deliver speeches by autonomously acting out a script. EDGAR is being led by Assoc Prof Gerald Seet from the School of Mechanical & Aerospace Engineering and the BeingThere Centre at NTU.

“EDGAR is a real demonstration of how telepresence and social robots can be used for business and education. Telepresence provides an additional dimension to mobility. The user may project his or her physical presence at one or more locations simultaneously, meaning that geography is no longer an obstacle”, affirmed Prof Seet.

ABC News reported that, the humanoid “receptionist” was presented at a new media showcase Tuesday at NTU, where her human creator, professor Nadia Thalmann, predicted that “physical social robots such as Nadine are poised to become more visible in offices and homes in future.”

Forbes report said, Nadine is not only human-like in general; she’s actually a doppelganger - a clone, if you will - of her creator, professor Nadia Thalmann, with the same soft skin and flowing brunette hair. Appearance is not the only thing that sets her apart from other robots: she (or it) features also what we might call a ‘personality’: she can recognize the people she has met, remember what they have said before and, researchers claim, she can be happy or sad.

According to the CS Monitor, so there's a sweet spot in robotics that roboticists have been pursuing for years she adds “where you can anthropomorphize, but it will not creep you out.”