

Robot tech makes longdistance relationships more bearable: SFU study

By: Wanyee Li Metro Published on Tue Feb 14 2017



The technology is one of several projects a SFU research team is developing for long-distance couples. A long-distance couple plan to have a romantic dinner Tuesday for Valentine's Day, but it won't be in-person, it will be done with the help of a robot and technology created at Simon Fraser University. SFU professor Dr. Carman Neustaedter and his research team conducted a study where people communicate to their loved one in another country through a mobile telepresence robot, made by Suitable Technologies. In Tuesday's case, the study participant will sit at the dinner table with the robot, which will be controlled by their romantic partner. It's a vastly different experience from communicating via video call, said Neustaedter, who teaches at SFU's School of Interactive Art and Technology. "We're finding the ability to actually move in a remote space adds this huge difference that makes you feel like you are much more present in the location."

Controlling the robot is simple, and can be done via keyboard and mouse or with an Xbox controller. But the technology is not a game, warned Neustaedter – it has real-life effects on relationships. "It shifts relationship dynamics a bit to empower both people," he said, pointing out that in a Skype or Facetime call, the local person is able to position the webcam wherever he or she wants. The robot changes that and even allows the remote person to interact with the local environment. Neustasedter says the feedback from couples in the study, who each spent a month with the robot, has been promising.

"It's been really positive. We've tested all of these technologies to understand whether they increase people's sense of social presence – the sense that your partner is in the same room, or right next to you," he explained. "All of them say yes it creates a stronger presence." Neustasedter's research team is also working on VR software that blends two people's views together – so that people feel like they are standing in the other person's shoes, and also a pair of gloves where one transmits 'touch' to the other. The idea is each person in a long-distance relationship would wear one glove. When one person moves their gloved hand, the other person would feel that movement from their glove. But lovesick couples won't find this technology in stores anytime soon, its still in the research phase and a company would have to pick it up, said Neustasedter. "I'd love to see this stuff for sale, because I think it really adds something to long distance relationships," he said.

**Original Article:** http://www.metronews.ca/news/vancouver/2017/02/14/robot-tech-and-long-distance-relationships-in-sfu-study.html