



Posted in [News](#), [Top News](#)

## Tech takes the distance out of 'long distance' relationships

Research will allow users to virtually share experiences from across the world

July 11th, 2016 by [Erika Loggin](#)

**SIAT prof Carman Neustaedter found his inspiration for the tech out of a desire to connect with his mother in another city.**

*Image Credits: Photo courtesy of University Communications*

An SFU professor's research will soon let you enjoy a bike ride with loved ones — even on opposite sides of the world. Carman Neustaedter, an associate professor in the School of Interactive Arts and Technology, is reimagining the way we stay in touch. His research is being conducted through SFU's Connections Lab (cLab), a research group focused on human-computer technology of which he is the director. Beyond Skype and FaceTime, Neustaedter wants to enable people to share activities over long distances. This could include going on a hike, playing sports, or visiting a museum — all with the help of a sophisticated mobile video communication system.

Neustaedter's study, *Be With Me: An Immersive Experience for Long Distance Couples* takes long distance dating to a new level, allowing for partners to "[share] their daily activities, experiences, and an understanding of each other's physical space." While the published study is focused more on romantic partnerships, Neustaedter says the technology is also applicable to families and friends hoping to connect over greater distances.

As a part of the study, two people went on bike rides in different areas. Users were equipped with gear to wear on their head that combined a smartphone decked out with a 360 degree camera and Google Cardboard so that each cyclist could see each other's surroundings and expressions. They could switch between viewing their own surroundings and their partner's.



When one cyclist stopped to admire the view, the other could see the same thing, as well as the smile on their friend's face. Neustaedter calls this a "parallel experience," where both individuals are doing the same activity at the same time, but in different places. The same technology can be used to create a what he terms a "mixed experience," where one individual communicates from home while the other does an activity.

This unique approach creates real time, two-way, interactive communication, combining the benefits of existing technologies like Skype and GoPro.

Neustaedter hopes his work will bring friends and family together in ways that overcome distance or mobility. "That's what we're really trying to do — to enable people to do things with their loved ones regardless of where they live in the world," he said.

He predicts social and accessibility benefits for people like distant family members, long-distance partners, and international students.

Neustaedter is one of over 50 SFU faculty members funded through the Natural Sciences and Engineering Research Council's Discovery grants. The grants contribute \$11 million for SFU research.

There's still a lot of work to do before this technology becomes accessible to the public. In addition to cost and infrastructure, Neustaedter acknowledged both safety and privacy concerns that have stopped technologies like Google Glass from being widely used.

"You need to design it so that it takes away people's anxieties and concerns about the social consequences about technology," Neustaedter said.

Neustaedter's work promises to bring people together in new and interactive ways, with the technology to make distance disappear.

**Original Article:** <http://www.the-peak.ca/2016/07/tech-takes-the-distance-out-of-long-distance-relationships/>