

Hugging or fighting. It's easy face to face, not so simple if there's a continent between you. Job done – by a crack squad of international digital pioneers in the far north of Scotland, fixated with conquering the distance factor.

Somewhere between virtual and reality, Remote Impact is just one of the future-gazing design projects being pioneered at the newly established Distance Lab, so called after its mission to invent new technologies and experiences that challenge the way we think about distance, and overcome its disadvantages.



Inspired by the physical and team-bonding benefits of sport, Remote Impact is part of a series of sport-based real-time activities being developed by the Lab's researcher Florian 'Floyd' Mueller and director Stefan Agamanolis.

"Current telecommunication technologies support generic messaging and businessoriented tasks, but they're not the most effective way of building a relationship based on mutual trust and shared experience," Floyd explains. "On the other hand, traditional contact sports like football, rugby and martial arts are well established team building and social networking activities. Remote Impact aims to bring people closer together socially, while in reality they might be miles apart."

How does it work? Simple. Your competitor, who may be many miles or even continents away, is projected life-sized on to what looks like a mattress standing against a wall. You throw a punch and a sensing system picks up exactly where you've just hit, and how hard. As your opponent ducks to avoid your next drop-kick or whatever, the system registers a miss. The more often you hit, and harder, the more points you win. If distracting your opponent with witty asides is your chosen tactic, you can talk to one another through an in-built voice connection.

A more gentle personal touch of technology is at the heart of the work of fellow Distance Lab member Elena Corchero. An experienced fashion and technology designer with a fine arts background and specialist knowledge in smart textiles, Elena's work is inspired by using technology to evoke memories, creating keepsakes and personalising the things we have around us to bring people closer together.

"Gifts and keepsakes allow us to remember friends and loved ones when we travel, or move to far away places," she explains. "For example in my whiSpiral – a shawl that carries whispered voices of your loved ones – I've integrated the circuitry directly into the fabric. Your friends then record short audio messages which are whispered back each time you wrap the shawl around yourself, or when you caress different parts of the fabric."

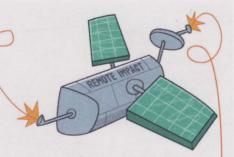
As well as a preoccupation with distance, Distance Lab also aims to live lightly on the planet and Elena's latest project Solar Vintage is one of the Lab's most recent innovations, blending 'smart clothing' with the quest for a greener lifestyle.

Elena explains how she developed her ideas. "So-called 'wearable computing' products on the market today shout 'technology' and are often crudely designed with a male-oriented sport focus. Fashion-oriented people, particularly women, may not choose to wear the typical solar jacket or backpack."

"The Solar Vintage collection of solar-powered accessories for the eco-fashion-minded consumer don't hide technology, but disguise it in a beautiful and stylish way, appealing to a new clientele. I've incorporated electronic components like solar cells, resistors, and LEDs directly into antique and hand-embellished fabrics, wiring them together into working circuits using conductive thread. The solar cells, in accessories like the handheld fan or parasol, are embroidered with motifs of endangered birds and are charged outdoors during the day. When you bring them indoors in the evening, they transform at all," she goes on. "The Lab invites the best international speakers here, and you really feel involved with the latest cutting-edge ideas." Put like that, pioneering interaction over distance could *only* be done from a relatively remote location. Everywhere is distant from somewhere, so if technology is your tool, then home can be anywhere on the planet.

Having a worldwide perspective comes naturally, as Chief Executive and Research Director Stefan Agamanolis explains: "We aim to be at the international forefront of innovation in digital media and communication technologies. In common with colleagues at the renowned MIT Media Lab in Boston USA, Distance Lab is developing an interdisciplinary work environment full of radically creative scientists, designers, artists, and engineers from all over the world. The Lab places emphasis on building working prototypes and channeling these into new products and services in the global marketplace."

From initial concept through design prototype, patent, manufacture to final market this



innovative research and development hothouse feels anything but academic and stuffy. All staff and research associates are under 35 and the atmosphere is funky, relaxed and creatively buzzing.

If it sounds like your kind of place, and you think you think you've got the skill and imagination to come up with ideas that take us one step closer to an alternative to teleportation, drop them a line at info@distancelab.org.

LINKS

www.distancelab.org www.lostvalues.com www.floydmueller.cor www.aoamanolis.com

Unlike other console games, it recognises and encourages intense brute force

into a decorative light display, powered only by energy stored earlier."

Elena was born in Lanzarote, Spain, where she learned fashion first-hand in the family business. Her international and multidisciplinary approach to her work began in Germany with a Fine Art degree specialising in multimedia, followed by an MA at Central St Martins College of Art & Design in London. She then spent six months at the London Business School, where she was part of the Creative Ventures project.

"I love working here," she says excitedly of the Lab. "It feels like you can get so much done and learn new skills. We do written research, but also build prototypes and testing. The team is very passionate and energetic and the facilities allow you to build almost anything."

But isn't the north of Scotland 'remote' from what's going on in the rest of the world? "Not

