Care Respite uses computer vision to monitor dependent people

- **Date:** December 12, 2017

The increase in dependent people in industrialised countries means that caregivers will be vital in the years to come, whether they are professionals or family members. Care Respite was founded in 2015 with the idea of making the work of caregivers easier. The spin-off from the Computer Vision Centre (Autonomous University of Barcelona) and the University of Barcelona also took part in the first CaixaImpulse event. In this short interview, CTO Sergio Escalera explains how the project took shape, and goes over the time they spent on the programme.

Tell us about your product.

It is a device used to monitor dependants via a computer vision system that analyses human behaviour. The system is able to recognise a series of 'at risk' behaviours, by automatically detecting certain postures and movements, such as sitting down, agitated movements or fainting. This means that 90% of the monitoring needs of dependent persons can be covered, according to studies carried out with a high number of end

users and caregivers in both public and private institutions in Catalonia. The device is easy to use, non-invasive and also works in the dark. In addition, it can be customised so that caregivers can adapt the alarms generated by the system to their particular needs.

Have you made any changes to the device over the last two years?

The features have not changed a great deal, because we already covered most of the main needs of caregivers for dependent patients. However we have refined both the software and hardware so that the product is more robust and reliable, while making it more visually appealing and user-friendly.

What are your short- and long-term objectives?

Right now we are in the large-scale manufacturing and presales stage. One of our objectives is to reduce production costs, which should have a knock-on effect to increase sales. Our idea is that within five years our device should be fairly integrated in both the public and private sectors, because according to the feedback we have received, it is a new solution that doesn't currently exist on the market. Over the long term we would like to integrate with other traditional telecare systems, which would allow us to add other types of data to those already gathered by our device, have better knowledge and improve efficiency when monitoring dependent people.

What did you make of your time at CaixaImpulse?

It was a very positive experience. When we entered the programme we had a prototype, and thanks to the training and funding we received we were able to take steps towards creating a minimum viable product, which we then tested in real-life settings, such as nursing homes. I think the most important thing is the balance between training and financing, which is very much shaped to fit the needs of each project. The fact that you are assigned a mentor, who advises you and guides you throughout the process, is also key. In addition, a community is created in which participants can share experiences, and that encourages synergies and networking between the different participants.

What advice would you give to a researcher who, like you, wants to become an entrepreneur?

I imagine that it depends on the area, but for technology the aim is always to have a social impact, which means the idea of creating a spin-off to bring a product to the market is always present. I think it is important to keep in mind just how important your team is: it has to be diverse, multidisciplinary and, above all, committed. Even great ideas won't get off the ground if the team isn't committed.