Sensor Technology Perceiving Health and Wellbeing Enabling Elderly to Age in Place by Stimulating a Healthy Lifestyle (STAY)

Contact:

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Who We Are

VicarVision is a SME Founded in 2001, about 15 employees

VicarVision provides state-of-the-art sensor technology perceiving humans. Flagship products are

- **Emotion Recognition with FaceReader**
- **rPPG Heart Rate Estimation from Face Video Input**

**Emotion Recognition**
We are able to:

- Contribute FaceReader as a sensor to measure the emotions of the elderly
- Contribute RPPG and HRV measurements from face video. Improve our implementations to handle challenging circumstances; for example when part of the face is hidden
- Implement emotion recognition from voice
- Implement mood estimation, using deep learning based on daily measurements from all available data: FaceReader measurements, emotion from voice, RPPG, HRV. Data from sensors provided by other partners, e.g. step counting data, indoor location data, mood assessment by a care giver, self-assessment of mood, sleep quality data
- Implement gesture recognition for user interaction
- Implement body pose estimation and gait analysis from video input using deep learning
Looking for

We are looking for a consortium or partners supporting this project idea by
• Experience on improving wellbeing for elderly
• Experience on applying digital technology for elderly
• Human computer interaction design for elderly
• Taking part in pilots as an end user
• Complementary sensor technology
• Applying sensors to measure sleep quality
• Extending emotion recognition to mood recognition
• HRV data analysis
• Analysis of raw sensor data using deep learning

With the mission to support elderly to stay longer at home!