Sächsisches Textilforschungsinstitut e.V.

Affiliated institute of the University of Technology Chemnitz

Managing Director: Dr. Heike Illing-Günther
Annaberger Straße 240 | 09125 Chemnitz | Germany | Phone: +49 371 5274-0 | Email: stfi@stfi.de | www.stfi.de

SeSMoVit-A – Sensor-based protection and monitoring systems for vitality and mobility in old age

Problem / Motivation

- Shortage of carers, demographic change, increase in cardiovascular diseases and postural defects, but also in health awareness among the population
- Objective is the development of a sensorised textile-based system (t-shirt) for monitoring vital functions and predictive care for a broad target group
- In contrast to existing systems, the research project is aiming for horizontal linking of the evaluation and assessment of various vital parameters
- Overall objectives: supporting carers, enabling older people to remain in their home environment in the long term, monitoring athletic performance for younger people

Solution

- Integration of all necessary sensors for non-invasive recording of health-relevant vital parameters using textile sensors where possible – partly modular for customisation to individual needs
- Embedding the system in existing infrastructures, taking ethical and legal aspects as well as data protection into account
- Use of artificial intelligence (AI) in order to generate predictive statements
- Validation of the system within subject studies

Project Launch

03/2024

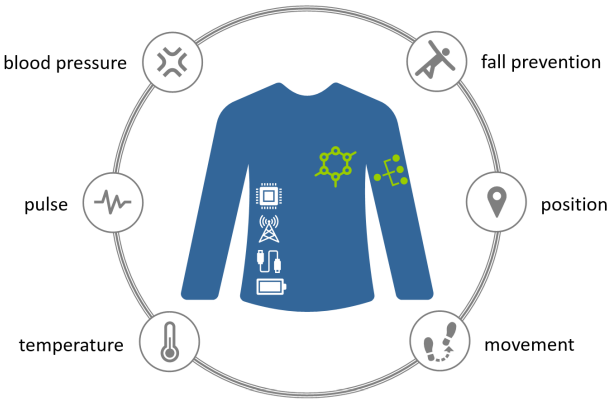
Project Partner

Brandenburg University of Technology Cottbus-Senftenberg

FiberCheck GmbH

MeDConNet. GmbH

Smart Textiles Hub GmbH



Schematic sketch: Sensor shirt with the main parameters to be analysed in the project (© MeDConNet. GmbH)

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Contact: Dipl.-Geogr. Marco Barteld, Phone: +49 371 5274-188, Email: marco.barteld@stfi.de
Theresa Meixner, M. Sc., Phone: +49 371 5274-225, Email: theresa.meixner@stfi.de