Hochschule Niederrhein
University of Applied Sciences

FTB
Forschungsinstitut für Textil und Bekleidung
Research Institute for Textile and Clothing

5GARderobe

Online shopping has grown immensely in popularity, but presents challenges for both consumers and retailers when it comes to returns, especially in the context of FITTING in the apparel segment. In addition, there are challenges regarding the representation of the physical properties of fabrics and, to a certain extent, the personalized fitting options of the garments.

Main objective of the project

- Use of immersive technologies to simulate clothing on avatars in order to reduce the return rate.
- Development of an infrastructure that can handle real-time processes with robust data protection safeguards.

In the project, a virtual wardrobe system was developed that orchestrates the following components in real time:

- Main instance
- Livelink
- Input of the application navigation
- Real-time motion tracking
- Customization of the avatar
- Catalogs + simulations

All components operate in a software-defined networking (SDN) environment, allowing the main application to run remotely while the sensors and other inputs remain close to the source.

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Results

The progress of the results within the project can best be seen in the following videos:
www.sat1nrw.de/aktuell/so-veraendert-5g-unser-leben-231219/
www.youtube.com/watch

Project partners / Funding

Colours&Sons GmbH, Active Value GmbH
Funded by the Ministry of Economic Affairs, Innovation, Digitization and Energy of the State of North Rhine-Westphalia

Duration

01.12.2021 - 19.02.2024 (24 Month)

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