

# Communication Training in VR

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## A Training application for the Dutch Railways

### The NS (the largest passenger rail transport company in the Netherlands):

- Is highly interested in the use of a VR communication training for their personnel
- Is willing to cooperate in scientific research.
- Education and training of NS personnel is of great importance. This is often done by making use of role play.

### The application

- Employees are instructed to help a disabled passenger to get on the train.
- Practicing visual task like situating the gangway, and social tasks related to communication with passengers.
- Several use cases, quiet scenario and more complex scenario including stress factors.
- Feedback in the game: due to ignoring the passenger, she will get more nervous
- Feedback of performance at the end of each round included tips for improving

### Conclusions:

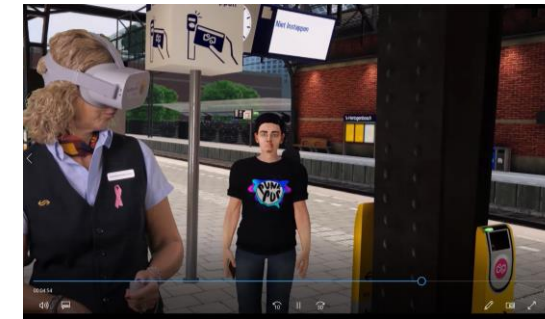
- Participants generally very positive and about system.
- Participants were enthusiastic about ability to engage with virtual agents in 'open' conversation using free speech.
- This type of training offers promising possibilities for training of staff, in particular for new employees.
- Roleplay is often experienced as not safe, as participants encounter feeling of being assessed instead of a safe environment to practice.



### AI Techniques

To process the user's input and generate appropriate output, the system makes use of a number of AI techniques, including:

- speech recognition,
- multi-modal social signal analysis
- dialog modelling



### The players state afterwards:

- *It was just real,*
- *I was there and it was lifelike*
- *Good instrument, better than roleplay*
- *Nice to get feedback at the end*
- *It is instructive, you'll get feedback that matters*
- *I was able to talk about everything*

