

## Of interest to:

Game Developers, Regulators, Product Owners, CCO, CDO, CTO, CIO

A World Leading SFI Research Centre



# Trust in Emotionally Expressive Artificial Agents

Generating avatars that are engaging and persuasive

## Background

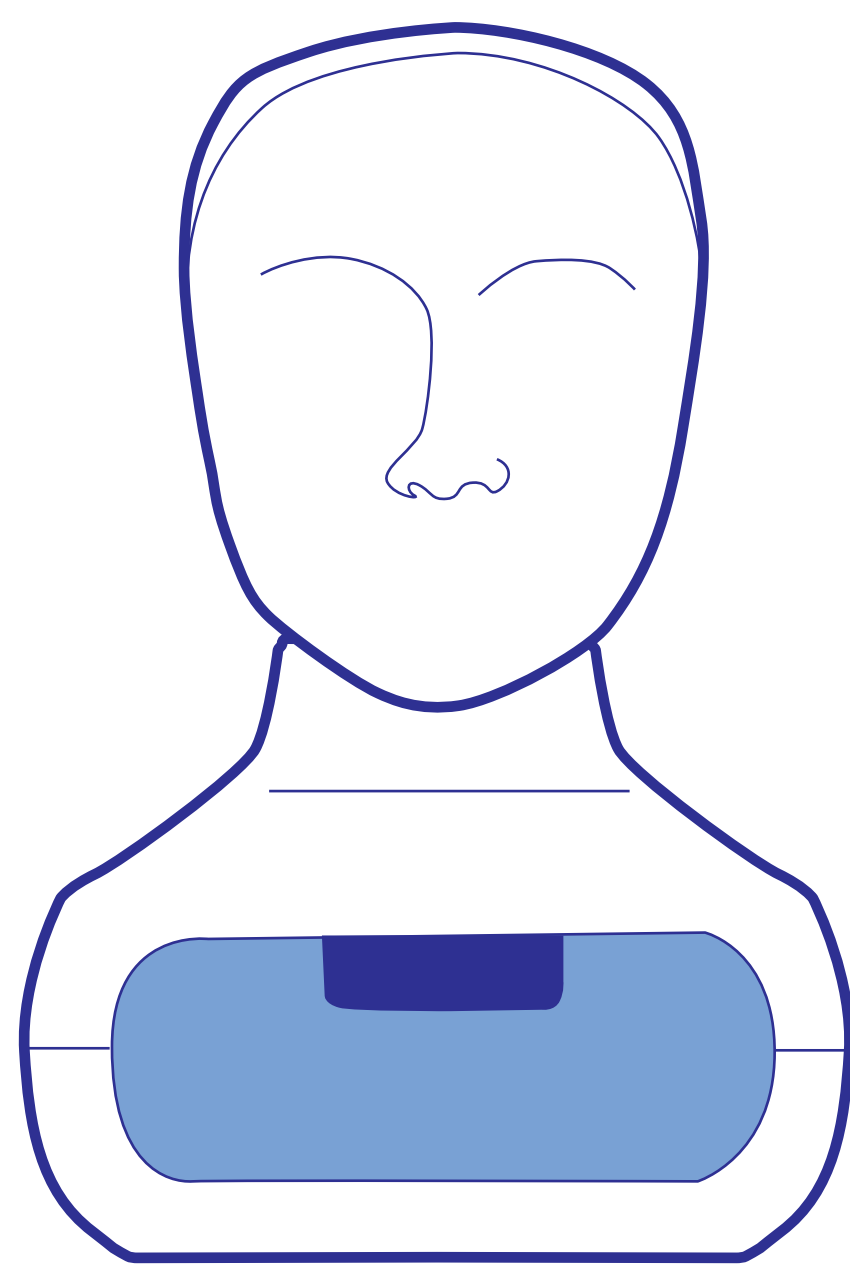
Emotions are essential for social interactions, they are multimodal (tone of voice, gestures, language) yet they are mostly studied unimodally. Emotionally expressive agents are trusted more, giving product designers the opportunity to explore deeper digital experiences with users.

## Challenge

How does a multimodal emotional expression affect trust in an artificial agent? To understand multimodality in the perception of artificial agents, it is necessary to build machines that people can trust and to engage potential users in the process of assessing this perception.

## Solution

ADAPT generated an animated avatar and deployed it within a Furhat robot with an associated application which assesses the extent to which the user's initial choices can be changed following their interaction with the avatar.



## Results and Benefits

- This is the first time that mismatched audio and video emotional expressions are used on highly realistic virtual characters and robots
- Research highlighted that perceiving the avatar as intelligent, knowledgeable and trustworthy increases behavioural trust whereas perceiving the avatar as happy decreases behavioural trust
- The research enables a new generation of engaging and trustworthy user experiences

## Use Cases

- Game development entertainment
- Avatars for health and training
- Personal assistants
- Concierge
- Contact centre interaction
- Digital receptionists

Dr I. Torre, Dr S. Le Maguer, E. Carrigan, M. Nicholson, D. Blake, J. Sam, Prof R. McDonnell and Prof N. Harte

To learn more about innovative ADAPT technologies, contact: [collaboration@adaptcentre.ie](mailto:collaboration@adaptcentre.ie)

FUNDED BY:

