

**Poster #** 10

## Title of poster: Tangy the Social Robot

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## Abstract

This poster describes the functions and behaviours that the robot Tangy has been designed to have during its main assistive activities (Bingo, Reminders and Telepresence). The Tangy robot is designed to: 1) navigate through the environment using a combination of different sensors, 2) detect users of interest within the environment, and 3) interact with these users using speech, gestures, and a touch screen tablet. Each activity requires certain assistive behaviours to be executed. The Reminder activity performs two distinct behaviours which consist of navigating to where the user is located, and providing a reminder to the specific user regarding an upcoming activity. The main behaviours for Tangy when facilitating the Bingo activity are separated into three categories during the game: 1) calling out Bingo numbers, 2) providing assistance, and 3) providing social utterances and gestures. The behaviours for the Telepresence activity are to navigate to where the user is located, prompt the user for the video call, and track and follow the user during the video session. We describe some initial performance results of Tangy (e.g. sensing & behaviour selection accuracy, etc.) from a preliminary user study.