

# ECHOES Technology-Enhanced Learning for Exploring and Improving Social Interaction Skills

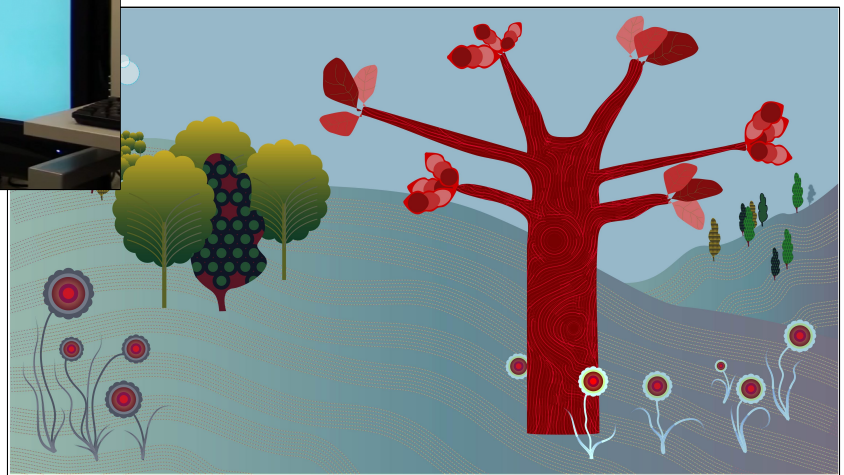
Katerina Avramides\* Sara Bernardini\* Jingying Chen\*\* Mary Ellen Foster†  
 Christopher Frauenberger‡ Oliver Lemon† Kaska Porayska-Pomsta\*

\* London Knowledge Lab \*\* University of Edinburgh † Heriot-Watt University ‡ University of Sussex

## THE ECHOES ENVIRONMENT



ECHOES provides an adventurous learning environment that detects and adapts to children's individual needs.



The ECHOES learning activities support exploration of social interaction skills, based on a combination of cognitive developmental theories.

## ARCHITECTURE AND COMPONENTS

The multimodal technologies behind ECHOES embody and integrate a number of cognitive abilities: gaze tracking, smile detection, intelligent narrative planning, multimodal event detection, and planning for intelligent embodied characters.

