

T2D Human-AI robot teaming testbed

PDF version



Figure 1: T2D environment

The T2D Human-AI Robot Teaming testbed is a testbed for Human-AI Robot Teaming. The environment is designed in 3D with urban search and rescue in emergency environment. The robot can be controlled with Wizard of Oz interface. (source). The original task is aimed at a three-membered team (mission commander, robot navigator, safety officer) but can be played by any number of agents.

This test environment only supports Windows out of the box. However, if needed, it can be built for macOS and Linux.

Installation

- No installation is required. The testbed is available for download from the [here](#) (Note: this link is only accessible with a UW-Madison email address).
- Prebuilt trials are available in **prebuilt** directory and can be run by double-clicking **test3.exe** file within a trial.
- Several trials are provided (each trial differs in the position of the victims).
- One agent will need to create the room by clicking **create** button, and other agents can join the room by clicking **join** button (make sure the created and joined rooms have the same names).
- There are two settings: the agent can be human (option 1) or robot (option 2). And the hazard level can be visible (Assistance ON) or invisible (Assistance OFF).

- The agent can be controlled with the keyboard (WASD keys or arrow keys).
- The game can be ended by closing the window (press windows key and right click on the window in the taskbar and click close window).
- Game logs are saved in the **LOGS** directory at the desktop.

Usage