

How To Slap Down A Minecraft

Performing experimental research on robotic platforms involves numerous practical complications, while studying collaborative interactions and efficiently collecting data from humans benefit from real time response. SAGOR.INFO can circumvent some complications by using simulators like Gazebo to test algorithms and building games like the Mars Escape game to collect data. Making use of existing resources for simulation and game creation requires the development of assets and algorithms along with the recruitment and training of users. We have created a Minecraft mod called BurlapCraft which enables the use of the reinforcement learning and planning library BURLAP to model and solve different tasks within Minecraft. BurlapCraft makes AI-HRI development easier in three core ways: the underlying Minecraft environment makes the construction of experiments simple for the developer and so allows the rapid prototyping of experimental setup; BURLAP contributes a wide variety of extensible algorithms for learning and planning, allowing easy iteration and development of task models and algorithms; and the familiarity and ubiquity of Minecraft trivializes the recruitment and training of users.