Statistical Analysis Of Player Behavior In Minecraft

Interactive Virtual Worlds offer new individual and social experiences in a huge variety of artificial realities. They also have enormous potential for the study of how people interact, and how societies function and evolve. Systematic collection and analysis of in-play behavioral data will be invaluable for enhancing player experiences, facilitating effective administration, and unlocking the scientific potential of online societies. This paper details the development of a framework to collect player data in Minecraft. We present a complete solution which can be deployed on Minecraft servers to send collected data to a centralized server for visualization and analysis by researchers, players, and server administrators. Using the framework, we collected and analyzed over 14 person-days of active gameplay. We built a classification tool to identify high-level player behaviors from observations of their moment-by-moment game actions. Heat map visualizations highlighting spatial behavior can be used by players and server administrators to evaluate game experiences. Our data collection and analysis framework offers the opportunity to understand how individual behavior, environmental factors, and social systems interact through large-scale observational studies of virtual worlds. Just Another Wordpress Site