Gunslinger

2007-present

Imagine stepping into a portal to another place and time. You appear in a darkened room, hearing the tinkling of an upright piano, the clinking of glasses, and horses and coaches in the distance. As your eyes focus, you make out a long, wooden bar full of glasses and whiskey bottles. Feeling a weight around your hips you realize you are wearing a holster with a six-shot revolver. A conspicuous metal star sits pinned to your chest. The star says "U.S. Ranger." Suddenly you realize someone is staring at you from across. He looks like a bartender out of an old American western movie. "Howdy Ranger," he says. "You're here to rid our town of that evil bandit, Rio Laine, right?" You feel several eyes turn to you, waiting expectantly for an answer…

Welcome to Gunslinger, an interactive-entertainment application of virtual humans that transforms this iconic movie scene into a vivid semblance of reality.

Gunslinger combines virtual humans technology, and Hollywood storytelling and set building into an engaging, mixed-reality, story-driven experience, where a single participant can play the hero in a wild west setting by interacting both verbally and non-verbally with multiple virtual characters.

The Gunslinger project also pushes the frontier of virtual human research by proposing a new architecture for story-driven interaction. The system combines traditional question-answering dialogue techniques with a capability for biasing question understanding and dialogue initiative through an explicit story representation. The system incorporates advanced speech recognition techniques and visual sensing to recognize multimodal user input. It further extends existing behavior generation methods such as BEAT and SmartBody to drive tightly coupled dialogue exchanges between characters. Together, these capabilities strive to seek a balance between the open-ended dialogue interaction and carefully crafted narrative.

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