



P R E S E N C E



Holoportation



Virtual Humans



Haptics

What It Is.

PRESENCE is a toolset for hyper-realistic XR-based human-human and human-machine interactions.

Intelligent Virtual Human (IVH) refers to both virtual characters that are controlled by real users and are used for self-representation in virtual worlds, as well as intelligent virtual agents (IVAs) which are autonomous characters designed to interact naturally with humans in virtual environments.

Key Features.

- **Natural Language Processing (NLP):** Enables realistic conversations with contextual understanding and adaptive responses.
- **Emotion Recognition:** Analyzes user cues (e.g., speech) to respond empathetically.
- **Behavioral Adaptation:** Modifies actions based on user input and evolving scenarios.
- **Multi-Modal Interaction:** Integrates speech, text, and gestures for immersive communication.
- **Real-Time AI Training:** Utilizes machine learning to continuously improve performance and realism.
- **Cross-Cultural Customization:** Tailors language and behavior to match diverse audiences.

What It Can Do.

Intelligent Virtual Humans have the potential to:

- Act as virtual assistants or trainers in complex environments.
- Support therapy or education with empathetic, human-like communication.
- Create dynamic, interactive stories in games or simulations.
- Serve as virtual collaborators, streamlining tasks in professional workflows.

Advantages.

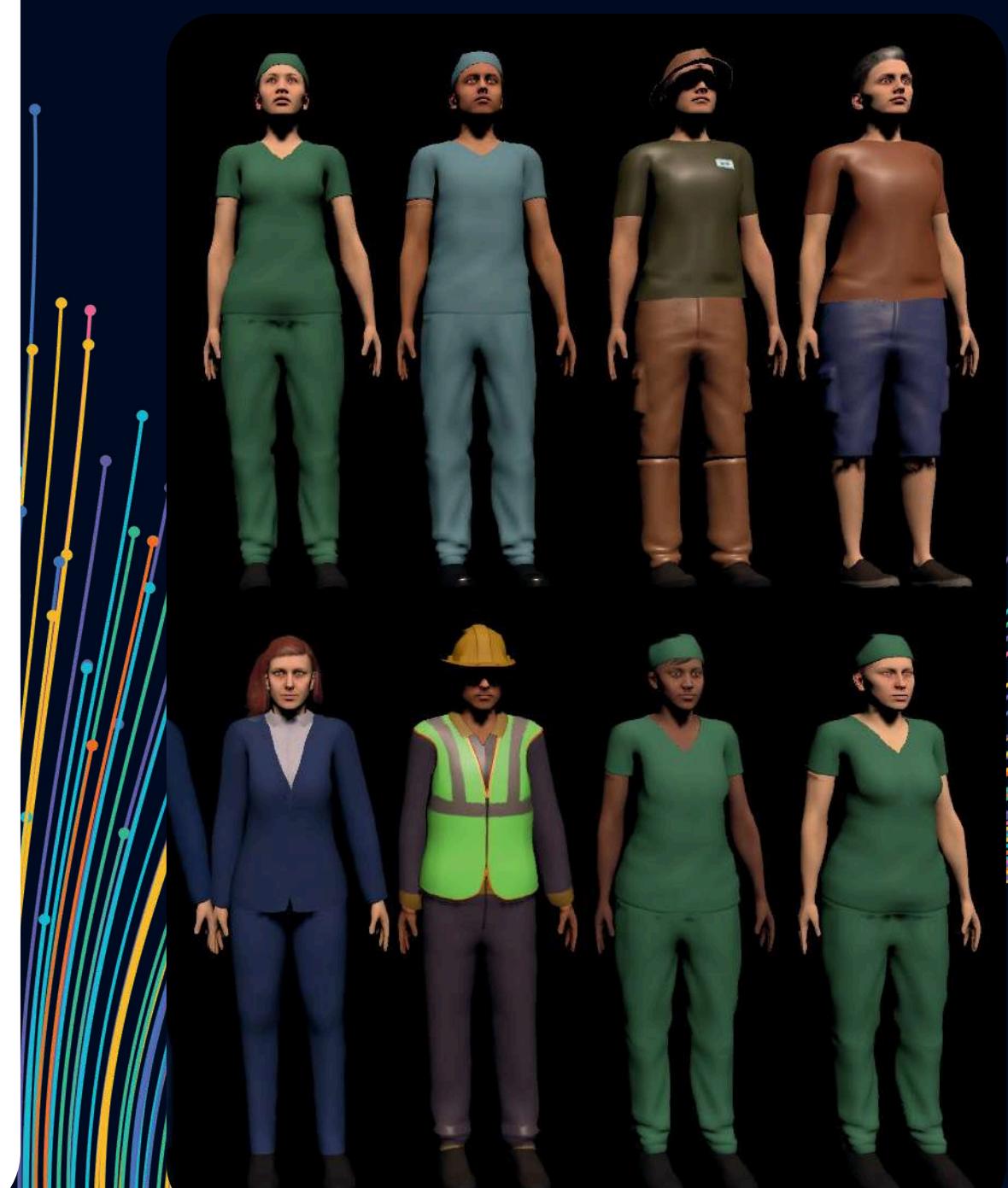
- **Human-Like Engagement:** Replicates natural communication for more effective and enjoyable interactions.
- **Adaptable Use Cases:** From professional training to gaming, IVH adapt to a wide range of applications.
- **Enhanced Accessibility:** Designed to operate across multiple XR environments and devices.

How Does It Work?

PRESENCE's Intelligent Virtual Humans represent a breakthrough in digital engagement, enabling realistic, meaningful, and transformative interactions.

The Tech Stack.

- **Cognitive AI** Combines advanced NLP, machine learning, and contextual processing to create lifelike, responsive behavior.
- **Emotional AI** Leverages facial recognition and sentiment analysis to detect and adapt to human emotions in real-time.
- **XR Integration**
Seamlessly integrates into VR/AR platforms for a consistent user experience across devices.



Impact.

Intelligent Virtual Humans are poised to enhance communication, training, and interaction in the following areas:



Professional Collaboration

Enable more personalized interactions in virtual meetings and collaborations, increasing productivity.



Manufacturing & Training

Enable virtual instructors for training scenarios, improving learning outcomes and skill acquisition.



Health

Support healthcare by offering virtual patient interactions for therapy, mental health, and remote medical consultations.



Cultural Heritage

Create lifelike, interactive experiences for heritage education and virtual tours, enriching cultural appreciation.



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