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Virtual Reality Software for Interactive Pharmaceutical Operator Training & self-assessment

Technology ID
2024-CHAN-70457

Category
Education & EdTech/Industrial & Workforce Training Platforms

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Researchers at Purdue University developed a virtual reality (VR), multimodal framework for training operators in pharmaceutical manufacturing. This VR module overcomes challenges in traditional training models, such as limited access to equipment, risks of unsafe operations, and lack of interactivity by offering innovative multimodal access, compatibility, and self-paced training and self-assessment. Moreover, the software offers immersive learning on a wide range of device types and promotes safety, operator confidence, and flexibility. Trainees are able to explore equipment components, visualize processes, and self-assess their knowledge, making this technology a transformative tool for pharmaceutical industry training.

Technology Validation:

An IRB-approved study (workshop) was conducted with the VR software. The results confirmed the robustness of the VR module, specifically in the areas of usability, convenience, and evaluation features such as navigation and interaction.

Advantages:

-Enhanced safety profile

-Distraction-free

-Affordable and customizable

-Multimodal access

Applications:

-Training for specialized equipment

-Simulating manufacturing scenarios

-Pharmaceutical industry

-Pharma companies

TRL: 4

Intellectual Property:

Utility-Gov. Funding, 2024-08-16, United States

Keywords: Virtual reality pharma training,Immersive operator training,Pharmaceutical manufacturing simulation,Multimodal training platform,Self-paced VR learning,Interactive equipment training,Digital workforce development,VR safety training module,Customizable pharma training,Remote manufacturing education