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3D Virtual Simulation for Radiation Safety and Survey Training

May 2021

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Idaho National Laboratory

hanging the World's Energy Future

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Applied Visualization Laboratory (AVL)

3D Virtual Simulation for Radiation Safety and Survey Training



Applied Visualization Laboratory (AVL)

- Center for Advanced Energy Studies (CAES), Idaho Falls, ID
- Contains state-of-the-art visualization technologies and 3D environments



Virtual Radiation Training – Pipe Scenario

- Collaboration between AVL and College of Eastern Idaho (CEI)
- Virtual reality training for conducting radiation and contamination surveys







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- Random scenarios
- Guided instructions
- User Interactions
- Sound and visual feedback
- Survey data storage



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Virtual Radiation Training – Results



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Virtual Radiation Training – Discussion

- Simulate radiation that is difficult to create in the lab environment
- Minimize radiation and contamination exposure during training
- Promote virtual training for education outreach
- Apply the radiation simulation to other laboratories

Current and Future Work

- Survey reports
- Save training progress
- Tutor/student mode
- More scenarios
- VR simulation
- Industrial training

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Thank You

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Applied Visualization Laboratory (AVL)

https://caesenergy.org/caes-lab/applied-visualization-laboratory/

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