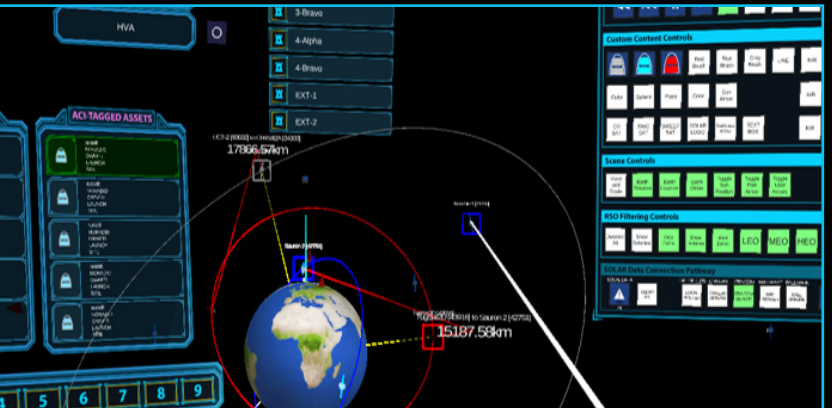
KWYN™ SOLAR

An Immersive Environment for Rapidly Understanding the Space Domain

To help students, educators, space professionals, scientists, and policymakers better understand the complex interactions of resident space objects, we developed the means to visualize and interact with the space domain in four dimensions using augmented reality (AR), virtual reality (VR), and mixed reality (MR), collectively called extended reality (XR).

KWYN SOLAR has been validated by multiple cognitive evaluation teams to reduce cognitive load, and it has been deployed to multiple government organizations, such as the US Air Force Academy, to improve learning outcomes for cadets going into Space Force career fields and for other USSF units. Other deployments include Space Delta 13 sections and Command and Control Squadrons.

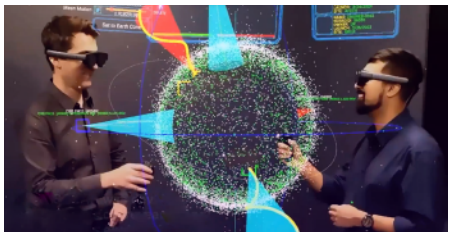


Augmented (AR), Virtual (VR), and Mixed Reality (MR) Solutions enable custom experiences contextually tailored to individual needs that maximize effectiveness based on deep human factors expertise

3D Visualizations, Filtering, and Annotation Tools enhance spatiotemporal understanding of satellite visibility on Earth, proximity-based conjunction assessments, and potential maneuver options

Synchronized XR Overlays display contextual metadata information based on user-level information access control to provide context for what is observed and to support intuitive understanding of dynamic satellite constellations

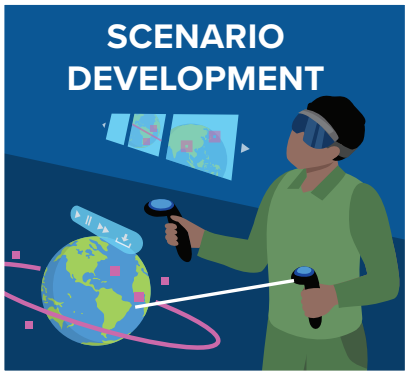
Device & Web Networking enable collaboration, data streaming, watchlist configuration, and rapid content sharing between 2D and 3D mediums

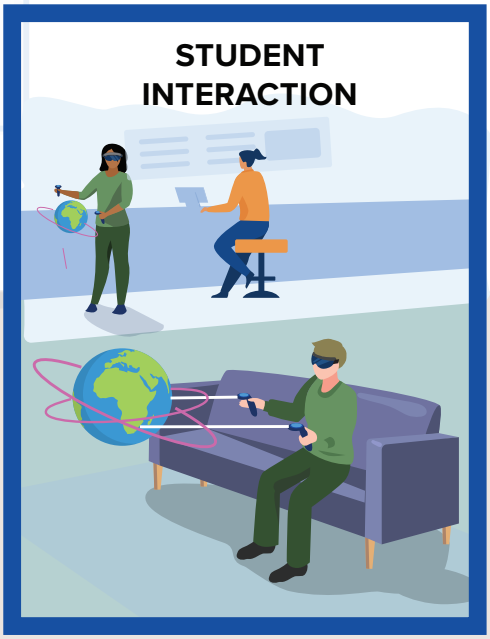


Core space education content, tools, and interaction systems provide the foundation for physics-based models and natural, intuitive interaction

Underlying 3D models support use by many AR and VR headsets, such as the Magic Leap, Meta Quest, and HTC Vive

Cross-device, synchronous networking support for education-based use enables distributed, remote learning with real-time interaction and feedback





CLASSROOM-BASED NETWORKING

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