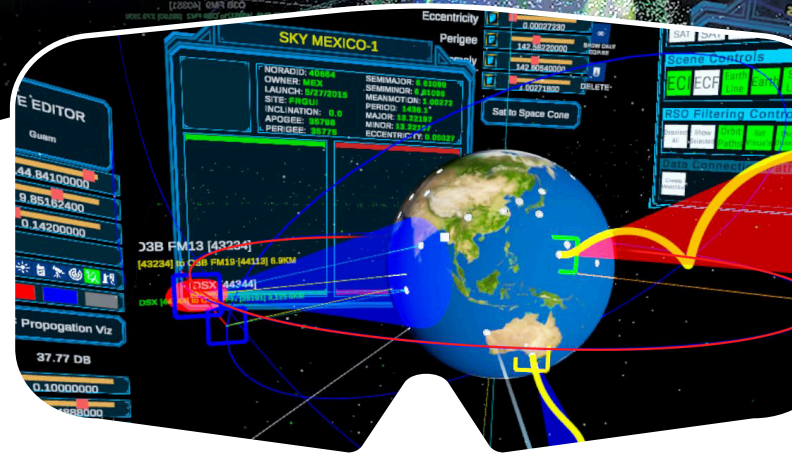


# KWYN<sup>®</sup> SOLAR

## Immersive AR/VR for space domain education and battle management

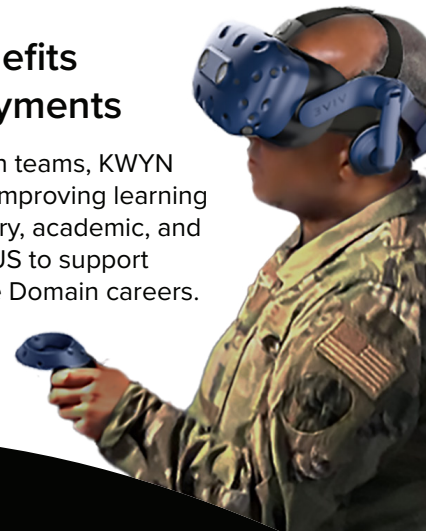
### Transforming operations, professional training, and space education

KWYN<sup>®</sup> SOLAR is an advanced AR/VR platform revolutionizing how students, educators, space professionals, scientists, and policymakers understand the complex interactions of resident space objects. Users are immersed in the four-dimensional space domain, enabling direct interaction and visualization for a deep, intuitive understanding of space concepts, risks, opportunities, and dynamics.



### Proven cognitive benefits and real-world deployments

Validated by cognitive evaluation teams, KWYN SOLAR reduces cognitive load, improving learning and retention. It is used by military, academic, and STEM organizations across the US to support training and education for Space Domain careers.



### Tailored, effective, and human-centered design



#### Customized AR/VR solution

Personalized experiences are tailored to individual needs with interactions informed by deep human factors expertise. Compatible with Magic Leap, Meta Quest, HTC VIVE, and other AR/VR headsets.



#### Seamless collaboration

Interactive real-time networking features enable collaboration, data streaming, watchlist configuration, and rapid content sharing.



#### Contextual metadata overlays

Synchronized data provides context based on user access level, supporting both secure and intuitive understanding of dynamic satellite constellations.



#### Advanced visualizations

3D visualizations, filtering, and annotation tools enhance spatiotemporal understanding of satellite field of view, satcom operations, and proximity-based conjunction assessments.



# Empowering the future of space science

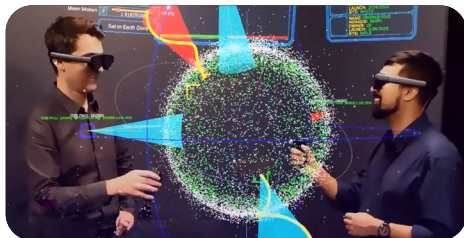
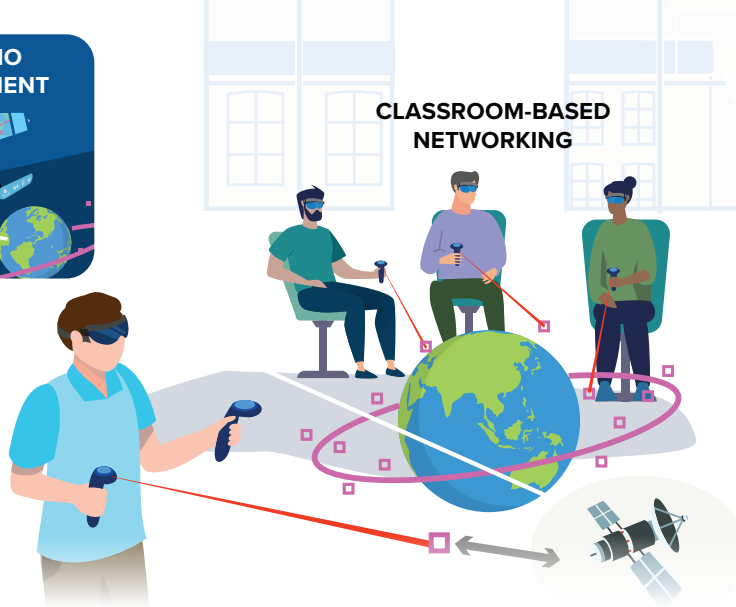
KWYN SOLAR accelerates space science by empowering students and researchers to explore new frontiers, publish and share findings, and lead space innovation as they explore complex math, astrodynamics, and new space architectures with technology demonstrated to enhance understanding and retention of this intricate content.

# Enhancing space domain awareness (SDA) and decision-making

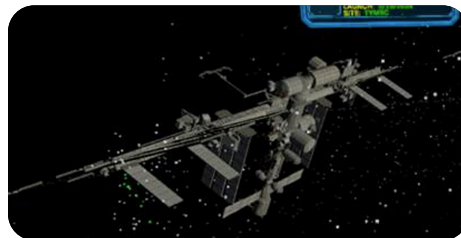
KWYN SOLAR integrates data for thousands of satellites, enabling actionable insights with real-time 3D visualizations, spatiotemporal data analysis, and metadata overlays. Operators visualize and manipulate satellite tactics, techniques, and procedures (TTPs), delivering better course of action (COA) insights for rapid SDA and effective decision-making.



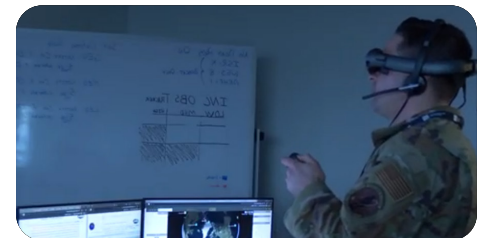
## CLASSROOM-BASED NETWORKING



Core space education content, tools, and interactive systems support physics-based models and natural, intuitive interaction



Advanced 3D models of satellites and space assets enable interactive exploration of space operations



Cross-device, synchronous networking facilitates distributed, remote learning with real-time interaction and feedback

**Contact us to start using KWYN SOLAR today!**  
Secure data handling, accredited hardware, TTP-integrated operational scenarios

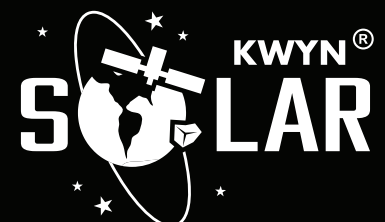
[CRA.COM/KWYN-SOLAR](https://CRA.COM/KWYN-SOLAR)

## CONTACT OUR TEAM

**Rob Hyland**  
Principal Scientist, Director of Program Transition  
[rhyland@cra.com](mailto:rhyland@cra.com)  
(617) 234-5088

**Daniel Stouch**  
Principal Scientist, Director of Space & Airborne Systems  
[dstouch@cra.com](mailto:dstouch@cra.com)  
(617) 234-5093

**Dr. Susan Latiff**  
User Experience Scientist  
UX Innovation Division  
[slatiff@cra.com](mailto:slatiff@cra.com)  
(617) 234-5002



**charles river analytics**  
a GRVITY company