

# Assessing Pediatric Life Support Skills Using Augmented Reality Medical Simulation with Eye Tracking: A Pilot Study

Authors: J Qian, A Rama, E Wang, T Wang, O Hess, M Khoury, C Jackson, TJ Caruso (Stanford University)

**EYE TRACKING DEVICE**  
Records gaze patterns to assess situational awareness



**THE PREMISE**  
AR and eye tracking technology were combined to enhance behavioral skills



**THE FUTURE**  
Combining AR with eye tracking can be useful in crisis management sims



## What is Augmented Reality?

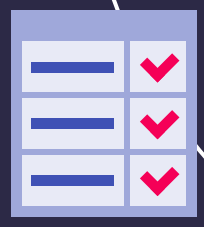
Augmented reality (AR) overlays holographic projections onto the real world, thereby minimizing dependency on additional medical simulation equipment. Because of its widespread potential, AR has become a burgeoning modality in medical simulation.



**THE SCENARIO**  
A 5-year-old boy with a complex history develops VT/VF under anesthesia



**THE PARTICIPANTS**  
"Code leaders" were attendings and trainees. Gaze patterns, time stamps, and rhythm logs during PALS were tracked



**THE OUTCOMES**  
No difference in time to VF recognition. All participants were extremely satisfied with the exercise.

