Eye Interventional Ultrasound

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Interventional ultrasound is the use of ultrasound imaging to guide needles and surgical tools to anatomical targets. This is a rapidly growing field as new advances are made in ultrasound image formation, tracking, processing and user interfaces. This talk will describe new innovations in guiding epidural needle insertions, guiding cancer resections with robotic minimally invasive surgery, and augmented reality displays. The future vision is to allow physicians to guide needles and surgical tools toward targets with sub-millimeter accuracy using realistic renderings of the anatomy.