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Paper Title:	Cross-Sectional Ultrasound Image Generation for Ultrasonographer Training System using Mixed Reality
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Abstract

This research presents a method for generating cross-sectional ultrasound images for ultrasonographer training systems. The work mainly focuses on developing an efficient technique that can produce application-quality cross-sectional ultrasound images from 3D volume data, which allows multi-angle cross-section generation (2D images). The proposed technique leverages volume and surface reconstruction techniques to effectively generate both 3D and 2D datasets. To evaluate the performance of the proposed technique, we employed a subset of the FPUS32 dataset as ground truth and compared the generated cross-sectional images with the original ultrasound images. The results demonstrate that the proposed technique is capable to produce images of comparable quality, highlighting its potential for effective application in ultrasound diagnosis, research, and training.