

Automated RGBD to C-arm Calibration

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Goals

To automate the manual calibration that registers a Cone Beam Computer Tomography (CBCT) scanner and Red-Green-Blue Depth Camera (RGBD)

Significance

Give surgeons a live mixed-reality visualization to place objects during surgery and increase patient safety

Results

Built automated algorithm with GUI that replicated manual error

Investigated a new phantom that reduces the time of the automated algorithm

