We present the first-of-its-kind evaluation of mobile AR surgical planning tool (CardiacAR) with medical experts, 4 cardiothoracic surgeons and 2 cardiologists, from Children’s Healthcare of Atlanta Heart Center.

Key Findings

- **Omni-directional slicing** helps surgeons more easily visualize cardiovascular anatomy
- **Mobile** app facilitates **portability**
- **Easy model import** supports patient-specific analysis
- **Model Viewing and Annotation** helps in **practical scenarios** to label and demarcate key regions

Technological Discoveries

1. **Innovative real-time omni-directional** slicing, including preview slicing which helps surgeons visualize the slicing plane and highlighted cross section surfaces
2. **Streamlining** deployment process and increasing accessibility of the application through asynchronous testing and feedback on TestFlight