



DEMONSTRATION OF IMAGE-GUIDED SURGICAL TOOLKIT (IGSTK) OPEN SOURCE SOFTWARE TOOLKIT

FEBRUARY 12, 2006

When: 8:30 pm to 10:30 pm

Where: Under the gazebo in the pool area (where lunches are served)

Who:

Kevin Cleary, ISIS Center, Georgetown University
(cleary@georgetown.edu, cell phone 202-294-3409)

Participants:

Patrick Cheng, ISIS Center
Julien Jomier and Stephen Aylward, Kitware Inc.

Description:

The Image-Guided Surgery Toolkit (IGSTK) is an open source software toolkit, which provides the basic software components needed to develop image-guided surgery applications. The focus is on robustness using a state machine architecture. This project is a collaboration between Georgetown University, Kitware Inc., the University of North Carolina, Arizona State University, and Atamai Inc. To date, the components have been implemented and an example application is available. All of the software is freely available for download by anyone. We are still working on adding some additional functionality, more example applications, and completing a book describing the project. This project is a two-year award that began in September 2004 and ends in August 2006. The demonstration will show the software in an example image-guided system incorporating an NDI Vicra optical tracker and a dummy torso. There will also be an informal social gathering with limited food (come early) and a cash bar. Basic information related to IGSTK can be found at the website www.igstk.org and the Wiki pages <http://public.kitware.com/IGSTKWIKI>.

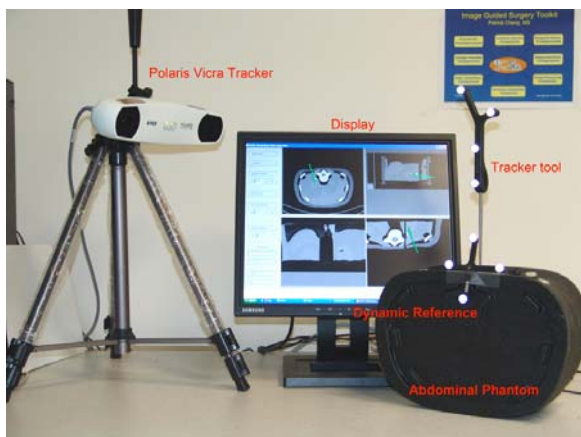


Figure 1: Demo setup

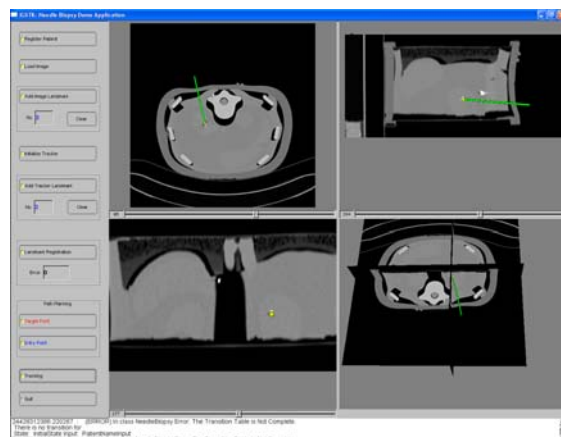


Figure 2: Screen shot

This event is not sponsored by SPIE.

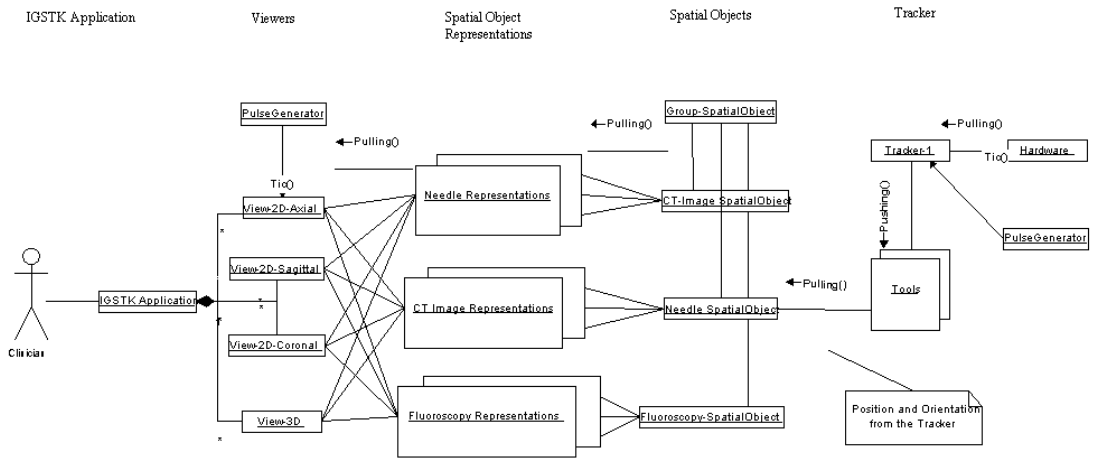


Figure 3: IGSTK component architecture



Figure 4: State machine diagram for example application (partial)