

3D Slicer

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10/24/2011 at 11:00 am
CBIM 22 (Multipurpose room)

Abstract

*A software platform for the analysis and visualization of bio-medical images and for research in image guided therapy.

*An extensible algorithm and application development platform with a powerful plug-in architecture.

*A free, open source package available on multiple operating systems (Windows, MAC, Linux) built on the NA-MIC kit.

The presentation will provide an overview of the available technologies and demonstrations of some of the capabilities.

Bio

Dr. Kikinis is the founding Director of the Surgical Planning Laboratory, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, and a Professor of Radiology at Harvard Medical School. This laboratory was founded in 1990. On February 24 2010 he was appointed the Robert Greenes Distinguished Director of Biomedical Informatics in the Department of Radiology at Brigham and Women's Hospital.

Dr. Kikinis is the Principal Investigator of the National Alliance for Medical Image Computing (NA-MIC, a National Center for Biomedical Computing, an effort which is part of the NIH Roadmap Initiative), and of the Neuroimage Analysis Center (NAC a National Resource Center funded by NCR). He is also the Research Director of the National Center for Image Guided Therapy (NCIGT), which is jointly sponsored by NCR, NCI, and NIBIB and co-director of the IGT program at CIMIT.

During the mid-80's, Dr. Kikinis developed a scientific interest in image processing algorithms and their use for extracting relevant information from medical imaging data. Since then, this topic has matured from a fairly exotic topic to a field of science. This is due to the explosive increase of both the quantity and complexity of imaging data. Dr. Kikinis has led and has participated in research in different areas of science. His activities include technological research (segmentation, registration, visualization, high performance

computing), software system development (most recently the 3D Slicer software package), and biomedical research in a variety of biomedical specialties. The majority of his research is interdisciplinary in nature and is conducted by multidisciplinary teams. The results of this research have been reported in a variety of peer-reviewed journal articles. He is the author and co-author of more than 260 peer-reviewed articles.

Before joining Brigham & Women's Hospital in 1988, he trained as a resident in radiology at the University Hospital in Zurich, and as a researcher in computer vision at the ETH in Zurich, Switzerland. He received his M.D. degree from the University of Zurich, Switzerland, in 1982.

See also: <http://www.spl.harvard.edu/pages/People/kikinis>

Faculty Host: Dimitris Metaxas