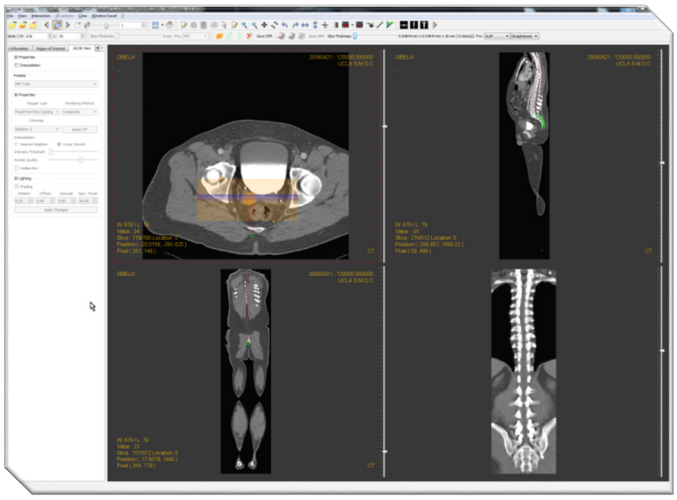
Medical Image **Software Toolkit**

MIST is a library for rapid-prototyping and fast development of medical image analysis and visualization applications.

Creation of medical image based applications very quickly and easily:

- **Multi-platform** (MAC OS X, Linux, Windows)
- **Smart DICOM parsing and classification**
- **Multiple 2D layouts**
- **3D visualization**
- **3D reconstructions**
- **Basic interaction tools**
- **Specific tools development support**



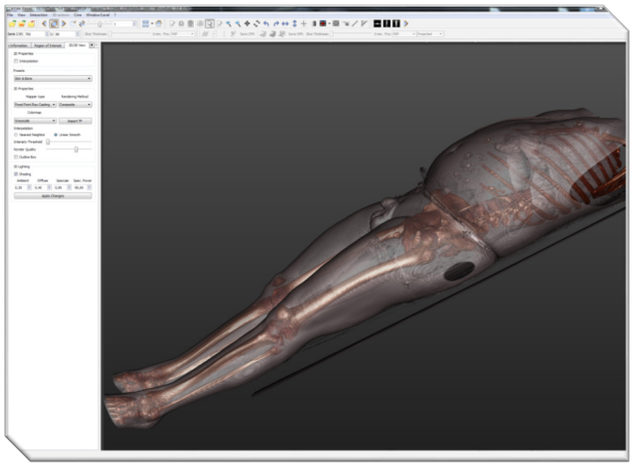
Medical Image based software for:

- **Training**
- **Radiology and diagnosis**
- **Treatment planning**
- **Treatment follow-up**

Use Cases

Generic radiology applications

✓ **eVida© Viewer**
(free version available online)



Diagnosis applications

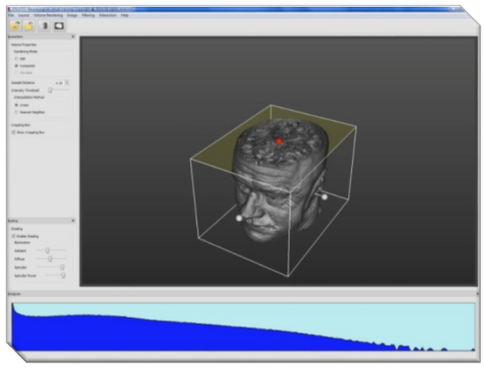
✓ **Cancer Lesions Follow-Up**
✓ **MRI Knee Arthrosis Cartilage Quantification**

Planning applications

✓ **Vascular Surgery Planner**
✓ **Orthopedic Surgery Planner**

Training applications

✓ **e-Pilepsy**



Research applications

✓ **Echography segmentation**

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MIST Modules and Architecture

Module	Description	3rd Party Dependencies*
Core	Data models for multi-dimensional medical image handling	ITK, GDCM
Filtering	DICOM parsing and organizing, image filters, image reconstruction and reformatting	ITK, GDCM
2DRendering	Interactive viewers and measurements tools for 2D rendering	OpenGL, GLUT
3DRendering	Interactive viewers for 3D rendering	VTK
3DShapes	Support for 3D interaction with multiple source objects	VTK

***All transfer processes in Vicomtech-IK4 are performed according to strict procedures that ensure legal control of the final software.**

Features

- Modular, extensible and layered architecture

- DICOM Browser for automatic and optimized patient/study/series file tree

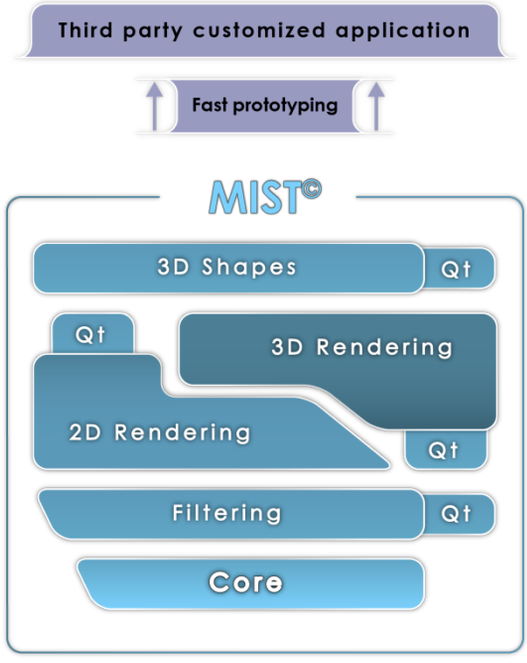
- Image Processing

- Radiology filters (W/L)

- ROI, pixel statistics, measurements

- 2D/3D Visualization and interaction, advanced series reformatting/reconstruction CPR/MPR, Volume Rendering

- Unit testing, documentation and examples



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