



Simple Start

Data and Image Analysis Software: Rapid Prototyping and Deployment Made Easy

VisiQuest provides a simple visual programming environment to analyze data and images, which gives the user access to all of its powerful functions and algorithms at the click of a button.

For Image Processing: Quickly perform many complex functions on image data, including:

- Animated sequence display
- Image feature extraction, capture, display, interpretation and classification
- Full colormap support, normalization and manipulation (RGB, HLS, HSV, YIQ, CIE, CMY, etc.)
- 2D and 3D plot display
- Multiband image color compression
- Geometric reflection, warping, and rotation
- Data band extraction from multiband images
- Spatial resolution and filtering (inc gradient operators Roberts, Sobel, Prewitt, Isotropic)
- Advanced frequency filtering
- Image comparison
- And much more!

With five-dimensional data support, VisiQuest also offers more advanced data processing technologies:

- Advanced algorithm prototyping
- Simulation
- Fourier and wavelet frequency and domain analysis
- Signal and surface plotting
- Multi and hyper-spectral visualization and classification
- Digital signal processing problems
- Linear equation solvers
- Elementary matrix operators
- Volume visualization
- Iso-surfaces
- Texture mapping
- Oct- and quad-meshes
- Streamlines
- Surface fitting
- Geometric rendering
- And much more!

Quickly develop solutions for complex data and image analysis. VisiQuest is optimized to perform on both small and large data sets, using up to five dimensions of data, easily handling data and images over 4 GB in size. The unique Integrated Development Environment (IDE) incorporates:

➤ Visual Programming Environment

Rapidly prototype solutions using the visual programming environment. In this easy to use application, you have access to all of the Data Processing and Visualization tools at the click of a mouse, no programming required. This tool can be used on its own to solve your data and image analysis needs or can be used with the other features of VisiQuest.

➤ Data Processing & Visualization

Access over 300 glyphs for data manipulation, signal processing, image analysis, processing of volumetric and time-series data, numerical analysis, interactive 2D and 3D data visualization, multi-spectral visualization, hyper-spectral visualization, streaming data operations, processing of multi-dimensional data sets, and more.

➤ Software Development Environment

Develop your own functions, manage the software life-cycle, from prototyping to deployment.

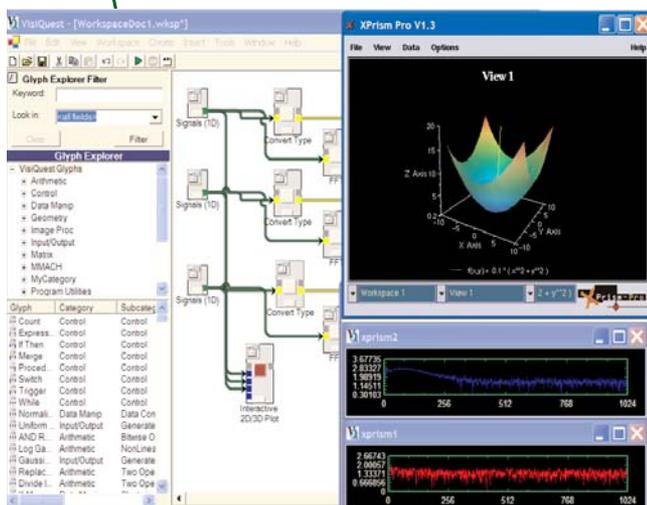


FIGURE 1
VisiQuest is readily used for the processing and exploration of multi-dimensional data. Here, several NMR brain scans are compared.

Advanced Capabilities

Powerful, Extensive Data and Image Analysis Development Environment

Though VisiQuest's extensive set of tools provide an incredible array of functionality, many specialized scientific users require unique algorithms which build on the existing analysis and data manipulation tools and functionality. VisiQuest enables you to build on its environment and directly access operators while you create programs to meet your unique needs.

Using the VisiQuest Integrated Development Environment, an advanced developer can create an application that can be run on any machine to interpret results of data sets and images. This allows you to easily share your application with others.

VisiQuest has hundreds of worldwide customers in commercial and government sectors in addition to academic and research environments. Some of the current application uses are:

- › Automatic target recognition
- › Bio/Medical imaging
- › Process control
- › Crash test simulations - GM/LANL
- › Cell counting using pattern recognition
- › Embedded systems
- › Filtering of digitized map images
- › Land cover classification for SAR imagery
- › Pattern recognition in microscopy images
- › Ground and air target model EM validation tools - NAIC/TANS
- › Teaching
- › And others ...

Specifications

Client Requirements

Windows 2000 & XP
Mac OSX 10.1, 10.2
Linux GLIBC 2.0, 2.1 & 2.2
HPUX 11.11 (with PA-RISC)
Sun Solaris 7+
SGI IRIX

File Format support:

ASCII, ARF, AFX, AVI, AVS, BMP, DIB, BRK, 30X, BTR, CAL, RAS, CALS, CLP, CCITT G3, G4, G3-2D FAX files, CUT, PAL, DCM, DIC, DC3 Dicom (Win32 ONLY), DCX, EPS, EPI, JP2, JPX, JPG, TIF, XIF, GIF, ICO, KDF, IFF, IMG - GEM Raster (Input only), IMG, IMT, ICA, JPG, KFX, LV, MAC, PNTG, MO:DCA, MP2, MSP, NITF, PBM, PCD, PCX, PGM, PCT, PICT, PNG, PNM, PPM, PSD, 8PBS, PTO, RAS, RAW, SCI, SGI, TGA, TPIC, TIF, TIFF, VIFF, WBMP, CUR, WMF, WPG, XBM, XPM, XDM

VisiQuest Integrated Development Environment

- › Supports C, C++, Perl, Shell Scripts
- › Automatic code generation for command-line and Graphical User Interfaces
- › Creation and manipulation of new toolboxes and software applications
- › Full workgroup configuration management
- › Complete workgroup application management for standardizing user interfaces, source code, and documentation
- › Single source tree support for multiple architectures
- › POSIX P1003.1 compliance

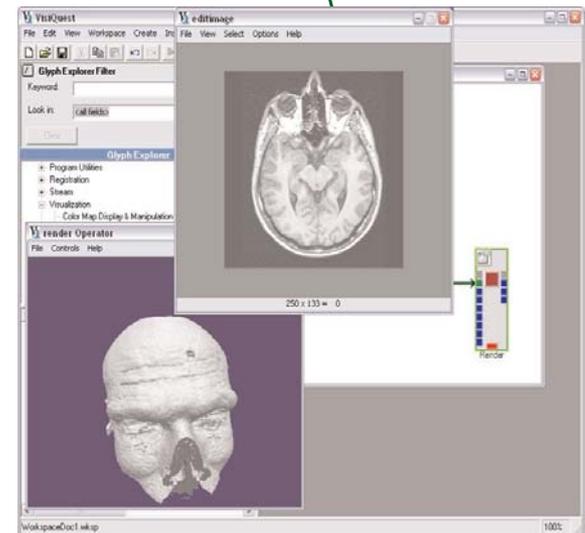


FIGURE 2

VisiQuest can be used to prototype complex analysis and visualization algorithms. Here, a workspace that identifies features of interest in a cranial NMR scan and constructs a 3D rendering of the brain surface.



FIGURE 3

VisiQuest can be used to create deployable applications for image analysts. Here, a custom application for identifying vehicles within satellite images was created for use by a technician.