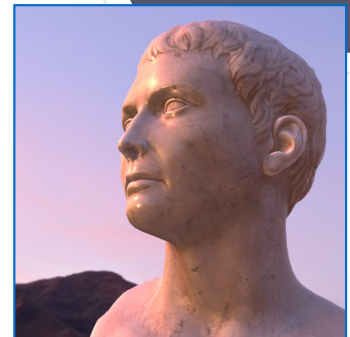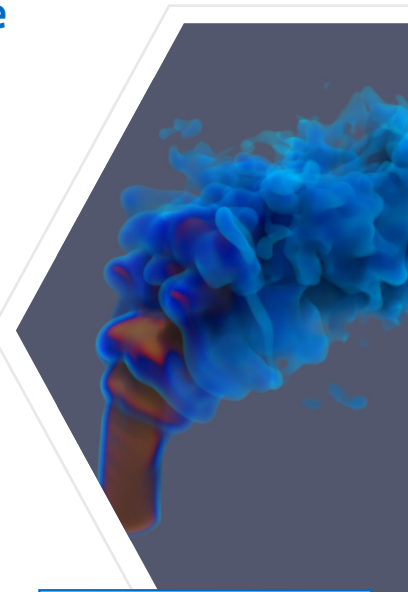# VTK

The Premier Visualization System
Leverage VTK by partnering with Kitware

The Visualization Toolkit (VTK) is an open source software system for 3D computer graphics, modeling, image processing, volume rendering, scientific visualization, and 2D plotting. It's the foundation of other powerful open source applications such as ParaView, 3D Slicer, CMB, and trame, as well as other custom commercial applications developed for the medical, simulation, and visual analytics fields.

Since it was first developed in 1993, VTK has become the premier visualization system in the world because it:

- **Supports an extensive variety of data types (e.g. images, point clouds, multiresolution grids, higher-order finite element data sets, etc.).**

- **Includes hundreds of advanced visualization, analysis, and data processing algorithms, along with data readers and writers to interface with external systems.**

- **Runs across all modern computing platforms ranging from mobile devices to supercomputers.**

- **Provides high-performance image, surface, and volume rendering, AR/VR support, and responsive interaction.**

- **Is cost-effective and innovative due to a large and active open source community.**

- **Employs a leading-edge, agile, test-driven software process to ensure stable and robust code.**

- **Python and Java bindings support the development of leading scientific computing programming applications.**

- **Takes advantage of threaded and distributed memory parallel processing for speed, scalability, and performance, even with large data sets.**

- **Can be used in web-based applications using VTK.js.**

The VTK You Know, Built for You

VTK can be used in various applications and domains to visualize large, complex data.
Kitware can help integrate VTK into your workflow or extend it to meet your project goals and requirements.

To learn more about working with Kitware, message us at kitware@kitware.com.

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