# Dossier: KITWARE INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,399,999.28

**Award Date:** 2024-09-26

**Branch:** NGA

## AI-Generated Intelligence Summary

**Company Overview:**

Kitware, Inc. is a software company specializing in open-source platforms for scientific computing, data analytics, medical imaging, computer vision, and high-performance computing. Their core mission is to advance science and innovation by providing accessible, extensible, and sustainable software solutions to researchers, developers, and commercial entities. They aim to solve the challenges associated with complex data processing, visualization, and simulation in various fields. Kitware's unique value proposition lies in their commitment to open-source development, enabling community collaboration, and providing customized support and consulting services to adapt their core technologies to specific client needs. This allows them to serve a broad market while fostering innovation and ensuring long-term maintainability and evolution of their software tools. They provide commercial support, training, and consulting services for these open-source platforms.

**Technology Focus:**

* VTK (Visualization Toolkit):\*\* A widely used open-source, freely available software system for 3D computer graphics, image processing, and visualization. Supports a broad range of visualization algorithms and rendering techniques.
* CMake:\*\* A cross-platform, open-source build system generator. CMake simplifies the build process by automatically configuring build environments across different operating systems and compilers, supporting large-scale software projects.
* ParaView:\*\* An open-source, multi-platform data analysis and visualization application. ParaView is designed for analyzing large datasets using distributed computing resources.

**Recent Developments & Traction:**

* January 2024:\*\* Kitware announced the release of their open-source VolView desktop application, a high-performance volumetric visualization tool that leverages VTK for enhanced scientific data analysis.
* October 2023:\*\* Kitware received funding from the U.S. Department of Energy (DOE) as part of the Exascale Computing Project (ECP) to enhance ParaView's capabilities for visualizing exascale data. This represents continued investment by the government in Kitware's core technologies.
* February 2023:\*\* Kitware released version 21.01.00 of the Insight Toolkit (ITK), an open-source, cross-platform system for medical image analysis.

**Leadership & Team:**

* Lisa Avila (CEO):\*\* Oversees the strategic direction and operations of Kitware.
* Will Schroeder (President and Co-founder):\*\* A key architect of VTK and ParaView, with extensive experience in scientific visualization and open-source software development.
* Kenneth Moreland (Chief Scientist):\*\* Specializes in high-performance computing and large-scale data visualization.

**Competitive Landscape:**

* MathWorks (MATLAB):\*\* While offering a broader range of tools, MATLAB competes with Kitware in areas like data visualization and algorithm development. Kitware differentiates itself through its open-source model, customization capabilities, and focus on specific domains like medical imaging and high-performance computing.
* TTTech Computertechnik AG:\*\* Provides commercial solutions for safety-critical systems including those used in aerospace and defense. They utilize technologies such as time-triggered ethernet. Kitware differentiates itself in this space due to their broader focus and software solution that integrate into many aspects of development.

**Sources:**

* [https://www.kitware.com/](https://www.kitware.com/)
* [https://vtk.org/](https://vtk.org/)
* [https://paraview.org/](https://paraview.org/)
* [https://itk.org/](https://itk.org/)
* [https://volview.io/](https://volview.io/)