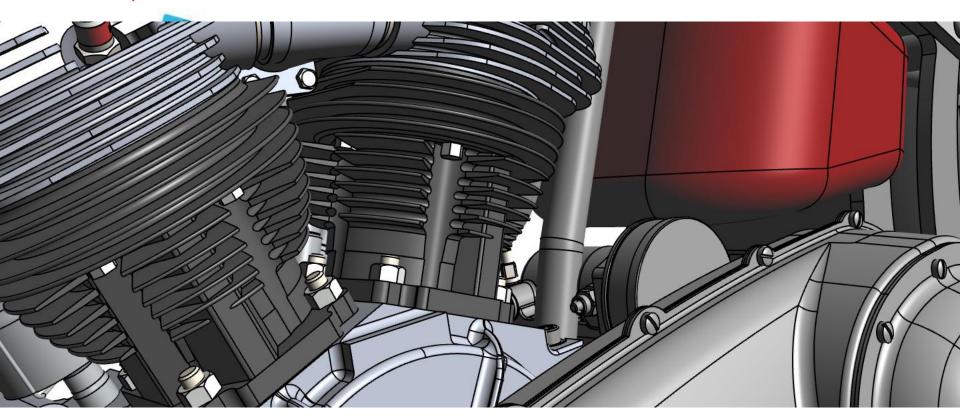


# **C3D Vision**

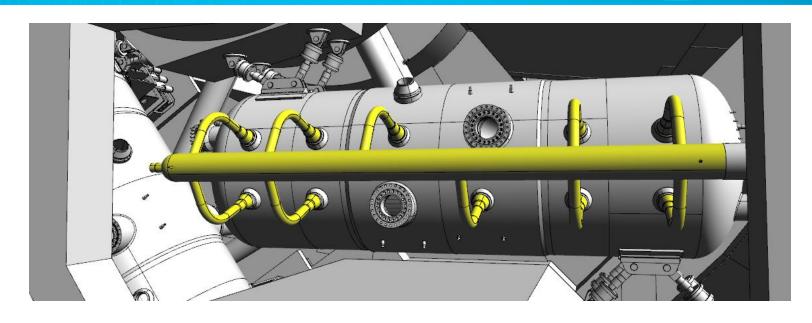
Oleg Zykov







### What is C3D Vision?



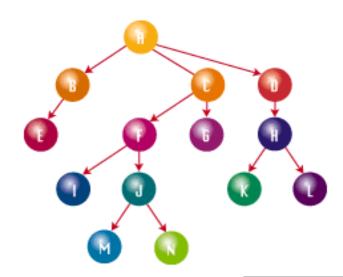
Visualization module of C3D Toolkit All-new component based on OpenGL Special for engineering software





### **Main Features**

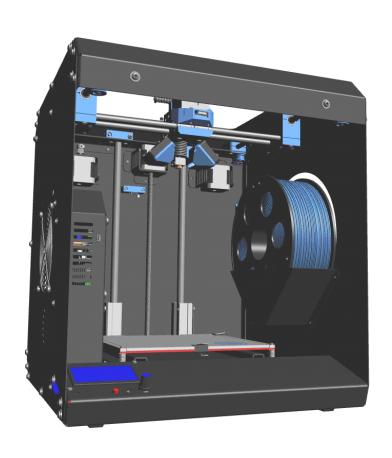
- Operates with polygonal models
- The scene is represented as a graph and is divided into segments
- Each segment has its own characteristics:
  - absolute and relative matrix
  - reference representation
  - hierarchical representation

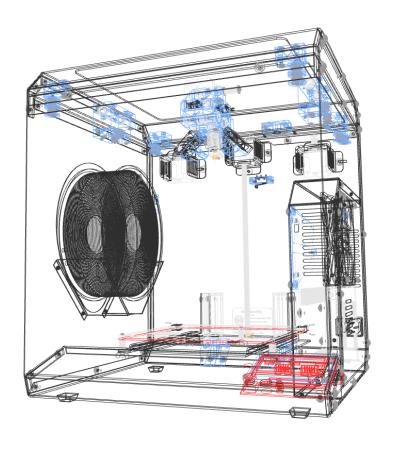






### **Render Modes**

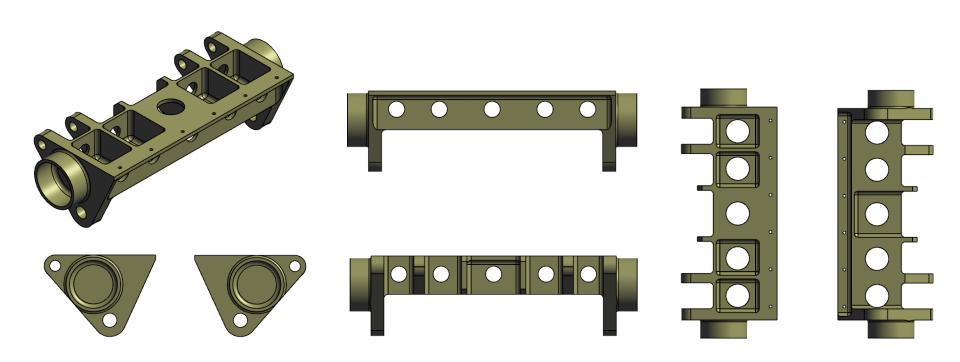








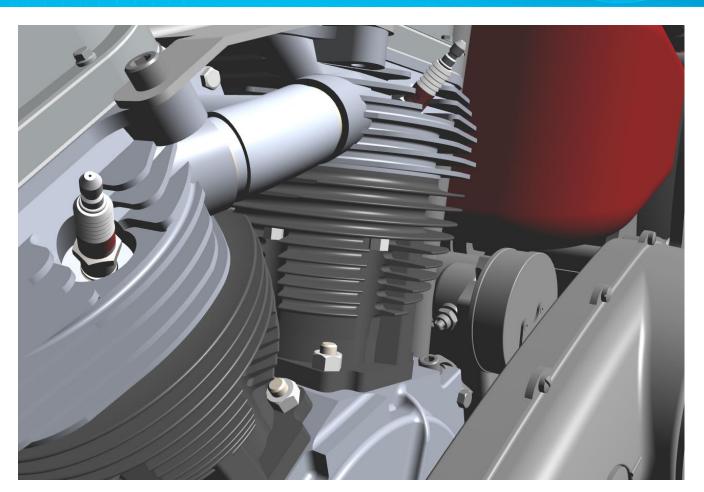
# **Standard Views**







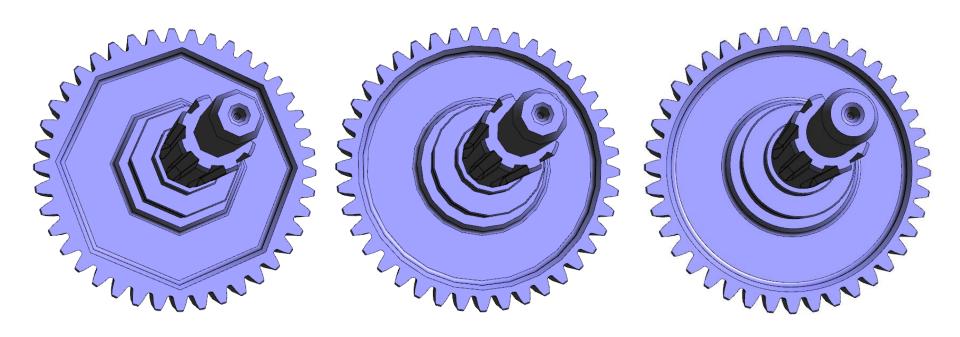
# **Lighting and Materials**







# **Level of Details (LOD)**

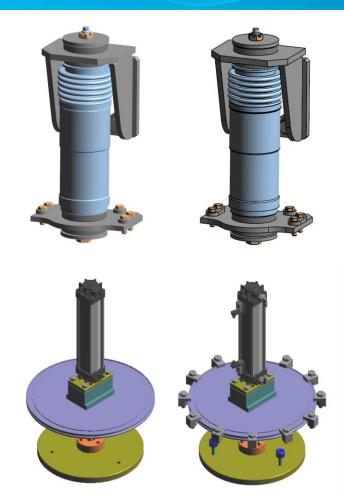






### **Performance**

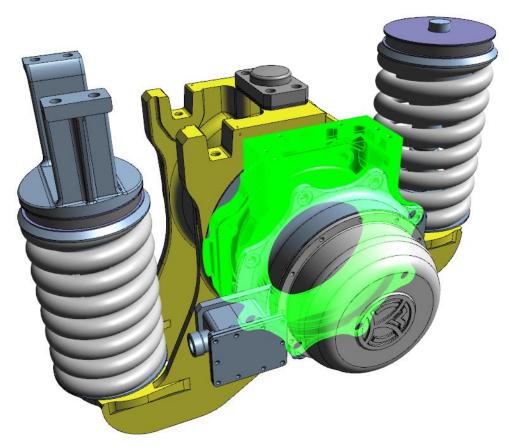
- Hiding edges
- Anti-aliasing
- Pixel culling
- Frustum culling
- Vertical synchronization
- Hardware acceleration







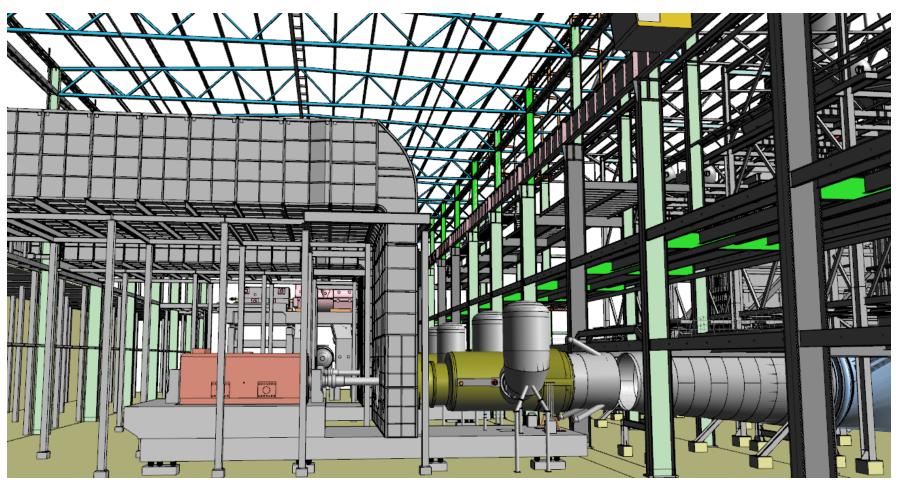
# **Selections**







### **Camera Control**







# **C3D Vision Demo**







# **C3D Vision Demo**







### **First Customers**

#### Tian Xiao (EE Boost)

"Another reason we choose C3D products is that they come with C3D Vision, which provides us lots of ready-to-use features for managing three-dimensional scenes and animations in our Qt GUI development. It significantly improves the visualization capabilities of our software by increasing the quality of 3D model rendering and speeding the processing of large assemblies."

#### Sergey Mitin (Center GeoS)

"We welcomed the news of a novel visualization module from C3D Labs, and so beta-tested it. We believe C3D Vision solves the compatibility problems we had been experiencing between software and state-of-the-art graphics cards. We look forward to increased capabilities of the new module in the future, as we find that C3D Labs always responds to customer wishes, and we will certainly provide some!"





### What's Next?

- Manipulators
- Texts
- Dimensions
- Sections
- Textures

- Occlusion culling
- NVIDIA tests
- Vulcan support
- Linux/Mac support
- C# wrapper

**Thank You!** 





# **More Option for C3D Users**



