

VolView

DICOM viewer for the web

Forrest Li @ Kitware

March 2nd, 2023

Software Development Panel: Web Visualization Frameworks

Scientific Computing and Imaging Institute, University of Utah

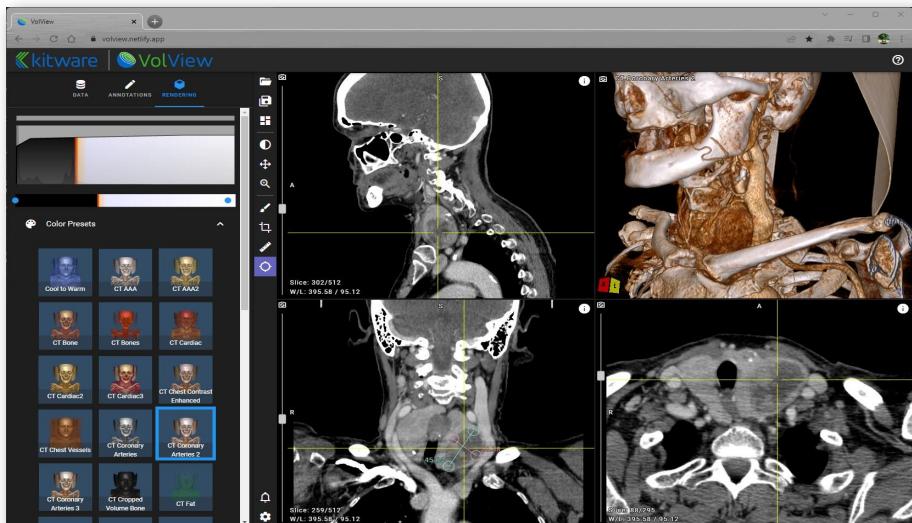
What is VolView?

- **Open-source** radiological viewer in the browser
- Fast and **interactive** visualizations
- **Secure** and local DICOM viewer
- Built on **VTK.js** and **ITK-wasm**
- **Customizable** for your workflows



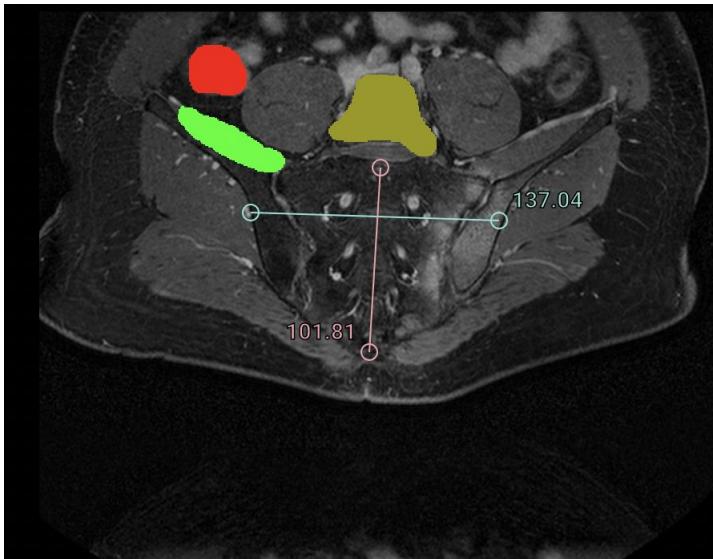
VolView Features

- Cinematic Volume Rendering
- Local DICOM loading
- Preset Colormaps
- Annotations
- Layouts
- Customizable
- ...and more!



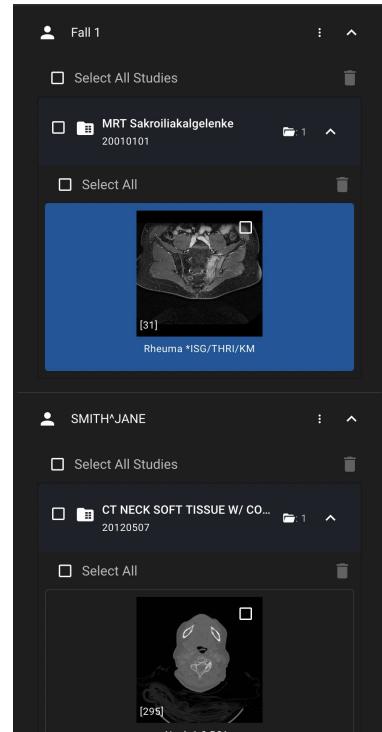
Annotations

- Measurements
- Segmentation masks
- ...more on the horizon
 - Contouring
 - Angle, Bi-dim
 - ROI



Native DICOM Loading

- Drag and Drop your DICOM datasets
- Splits into Patient, Study, and Series
 - Designed to give a general overview of your data
- No data sent to any servers!



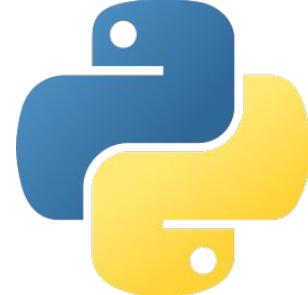
Realistic Volume Rendering

- Interactive and customizable
- **Cinematic Volume Rendering**
- Enables high-quality volume visualization
- All in the browser!



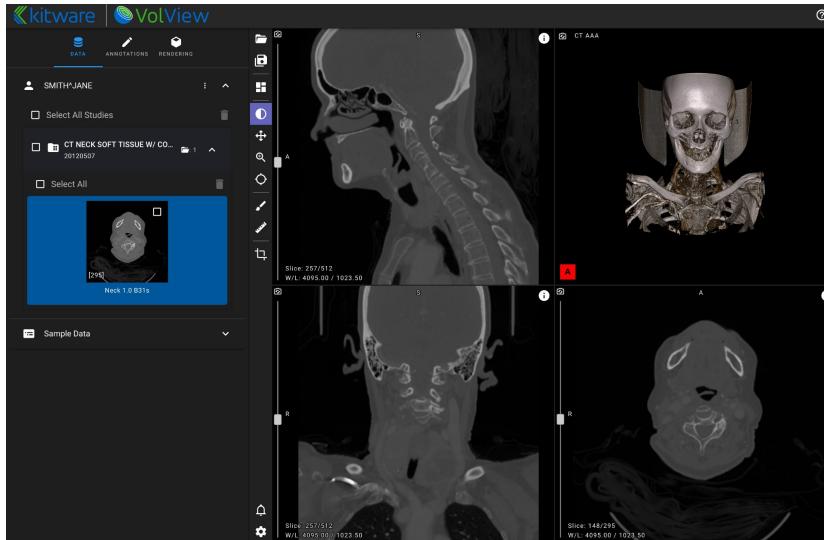
Python Integration

- Python integration enables:
 - Interface to segmentation, AI, etc. algorithms
 - Load server-side datasets
 - Entrypoint to application customization
 - Bundling into a single application



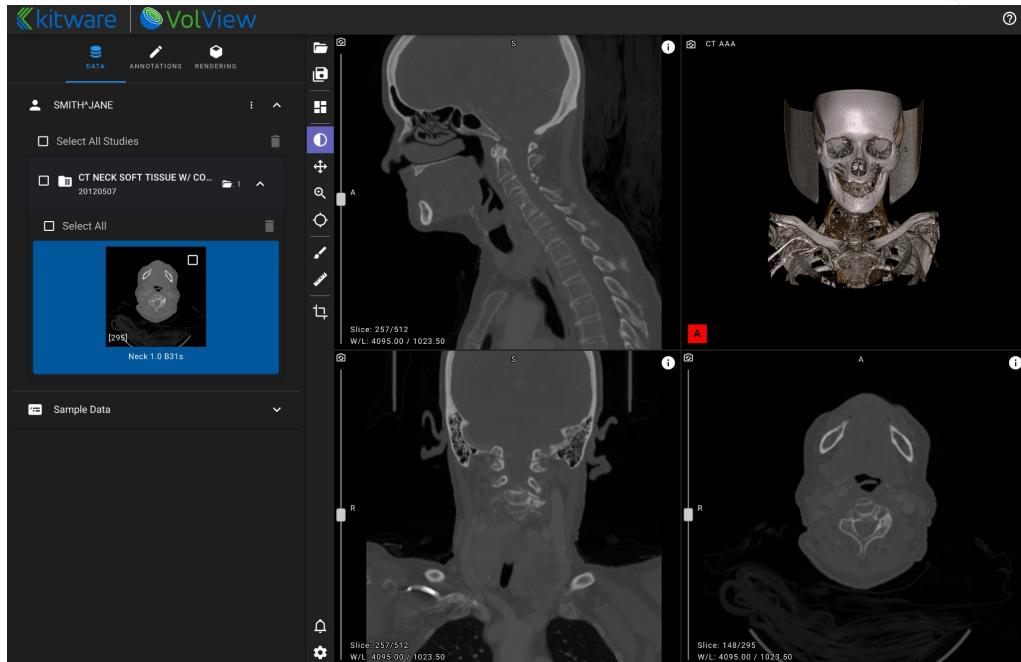
VolView Demo

<https://volview.netlify.app/>



How to get VolView

- [Homepage](#)
- [Launch the app](#)
- [Documentation](#)
- [Github Repo](#)



Thank You

- Scientific Computing and Imaging Institute
University of Utah
- National Institute of General Medical Sciences of the
National Institutes of Health: R24 GM136986