

InfraVis – The National Research Infrastructure For Data Visualization

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Scope

InfraVis Application Experts (IAEs) will help you visualize your research data from any scientific domain and give you access to state-of-the-art visualization competence, support, equipment, training and methods. With InfraVis, you become engaged in visual exploration of your scientific data.

Resources

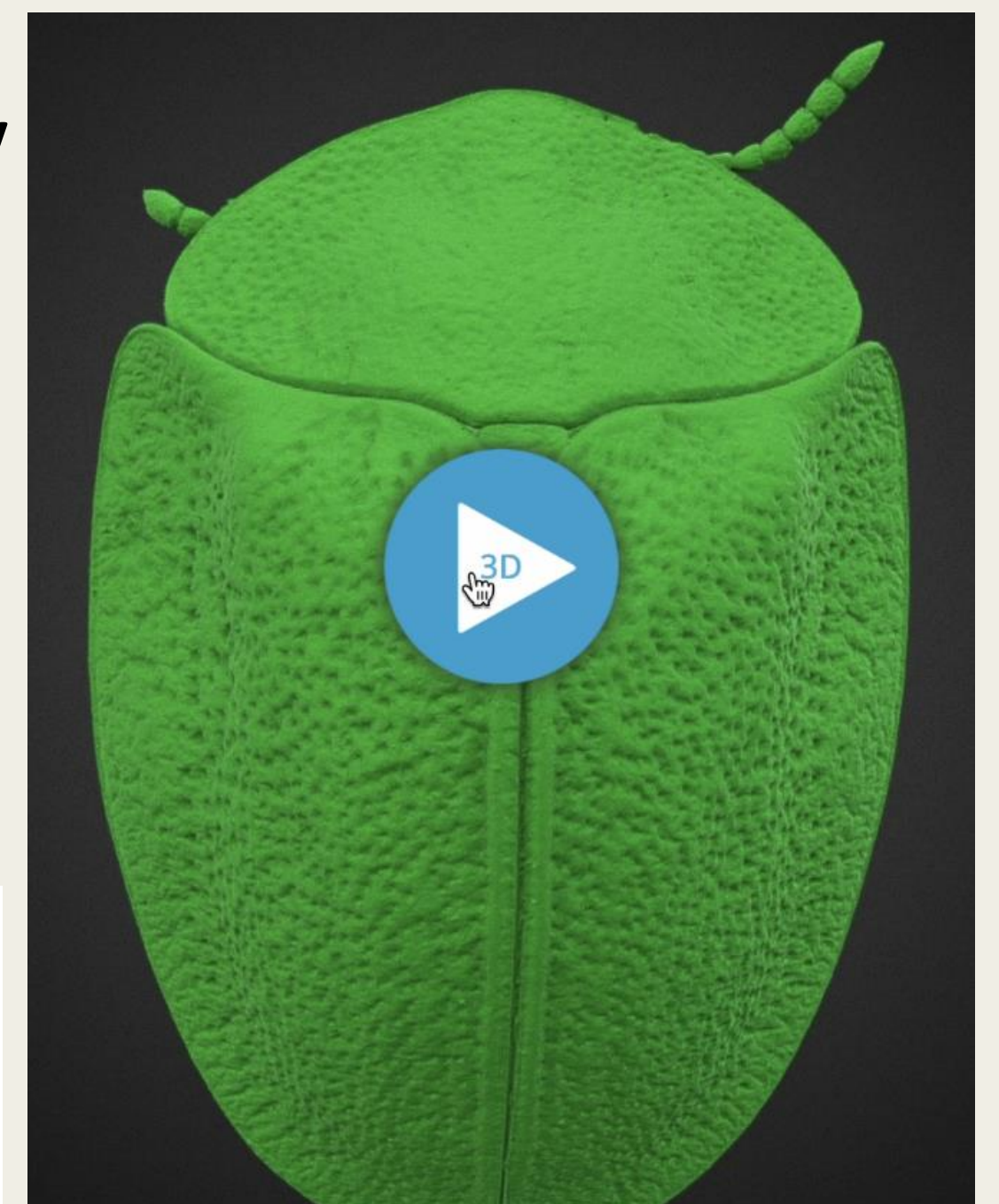
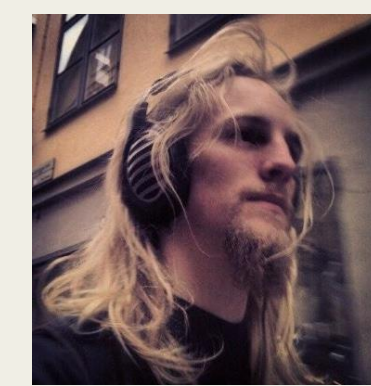
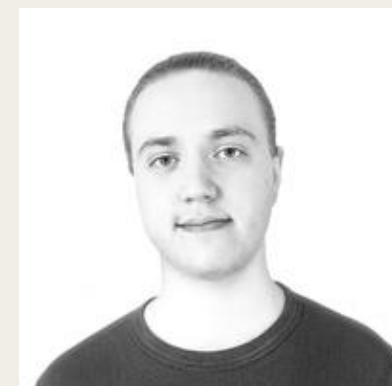
- Virtual Reality
- Augmented Reality
- Machine Learning
- Text Data
- 2D, 3D, 4D Datasets
- Graphical User Interface development
- Visualization Centers

Interactive visualization in the web-browser

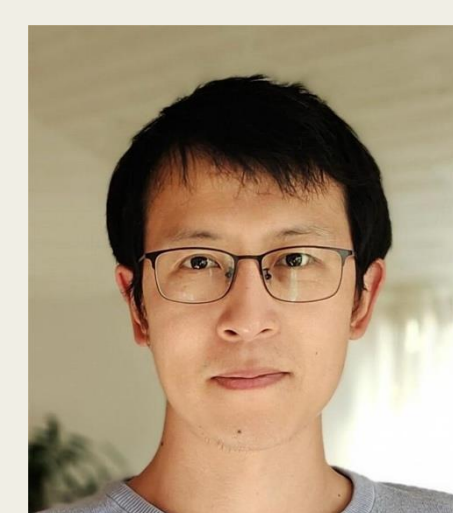
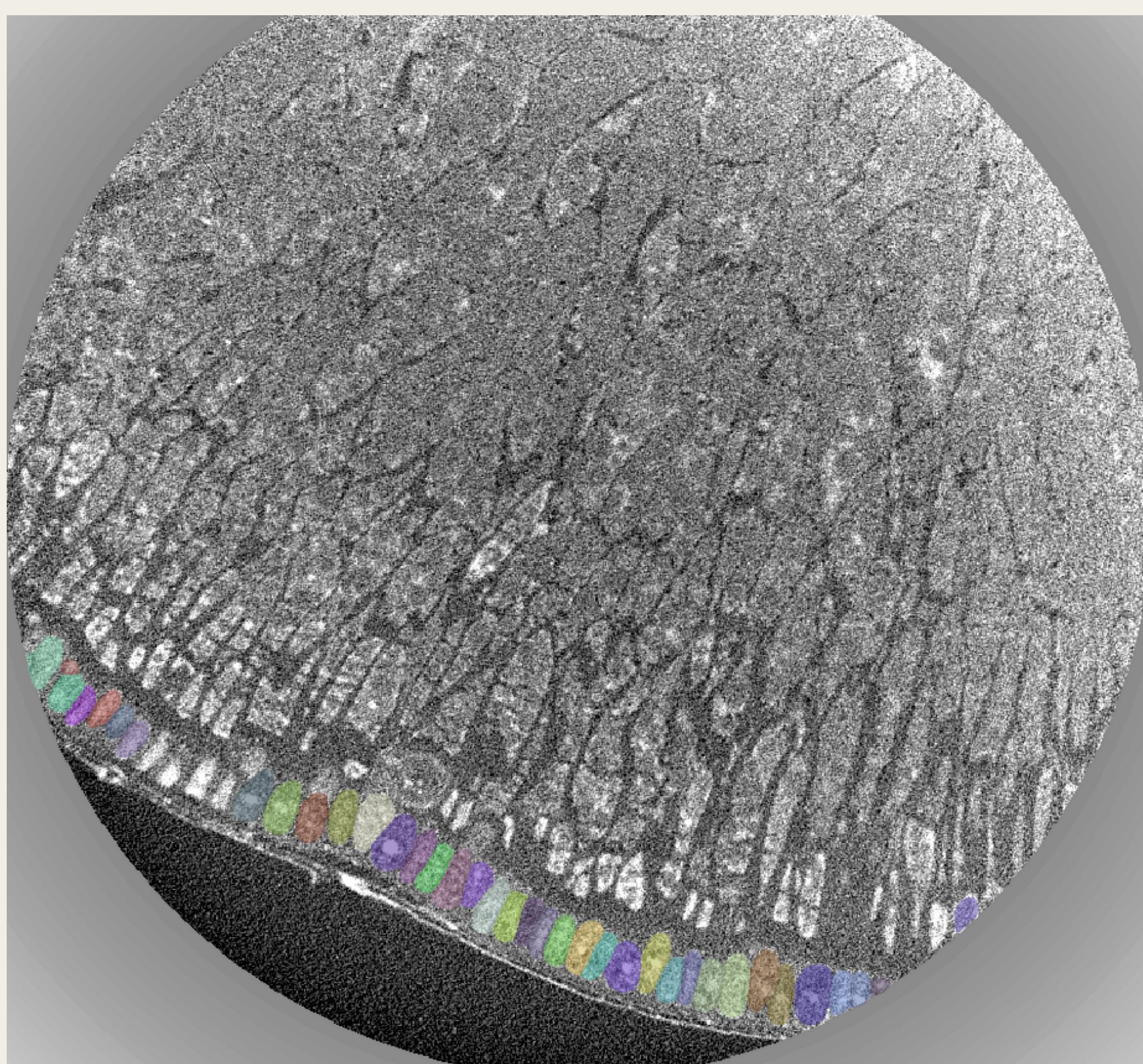
Creating a 3D mesh of a beetle scanned with X-ray microtomography

Users: Maja Tarka (LU) and Giuseppe Bianco (LU)

Filip Berendt (KTH), IAE in Visualization and Computer Graphics
Ingemar Markström (KTH), IAE in Visualization and Computer Graphics



Machine learning-based segmentation



Donlin Liu
IAE in Machine Learning-based segmentation

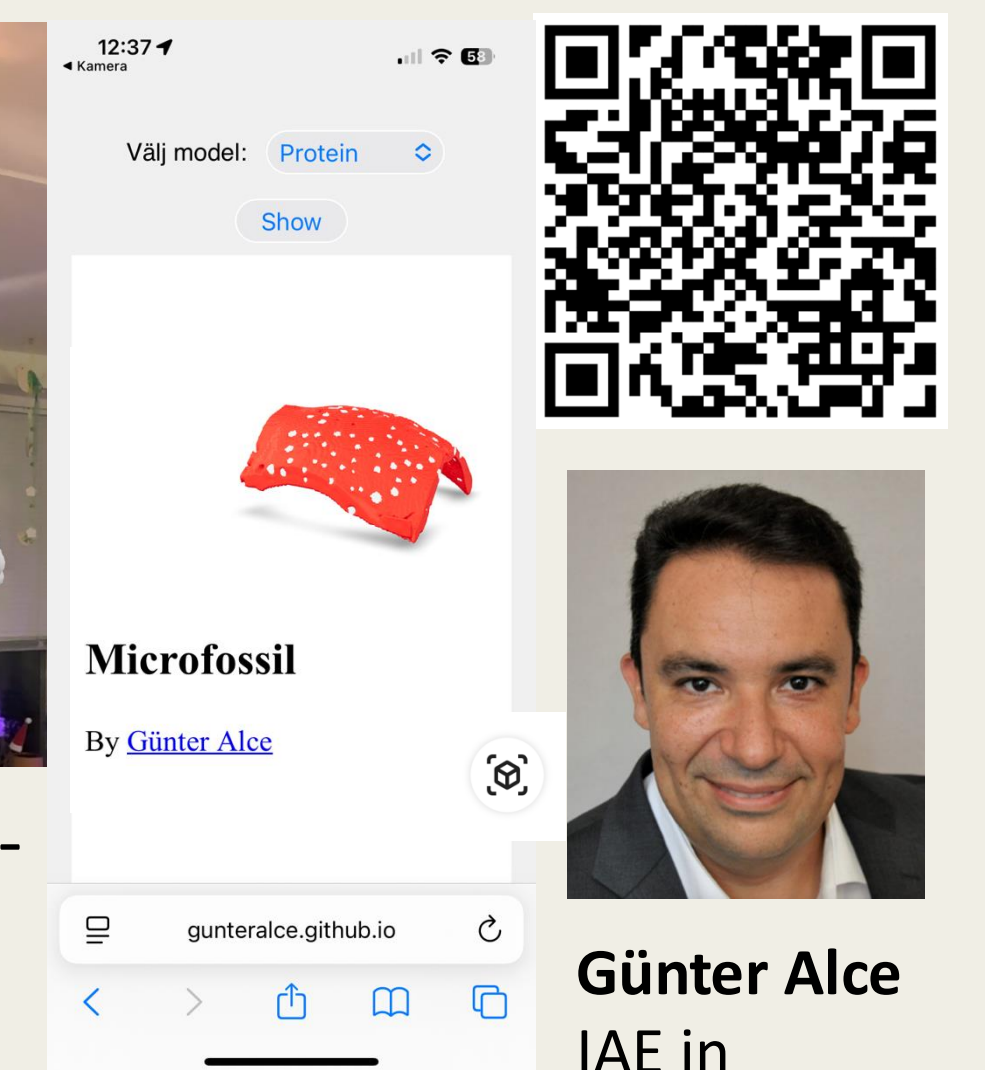


Alexandros Sopasakis
IAE in Machine Learning-based segmentation

Machine learning-based segmentation of the aleurone layer in seeds scanned with X-ray microtomography

Users: Mats Hansson (LU) and Nick Sirijovski, Oatly

Augmented Reality using a phone camera



A) Microfossil scanned with Synchrotron X-ray microtomography and B) example Protein (PDB file).

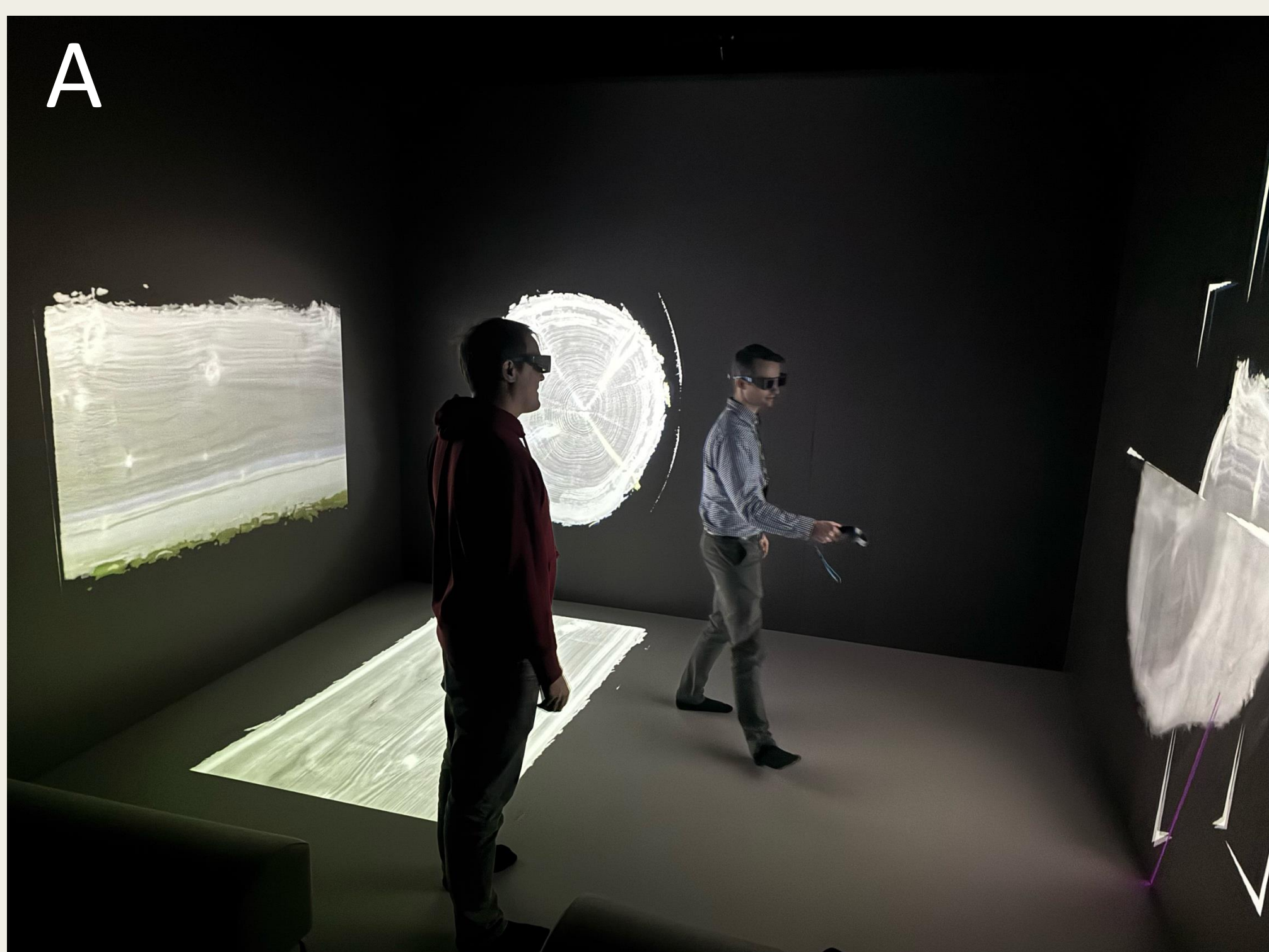
User: Helena Filipsson (LU)

Code & Tutorial: <https://github.com/gunterAlce/webar-tutorial/>



Günter Alce
IAE in Augmented Reality

Immersive visualization in a CAVE



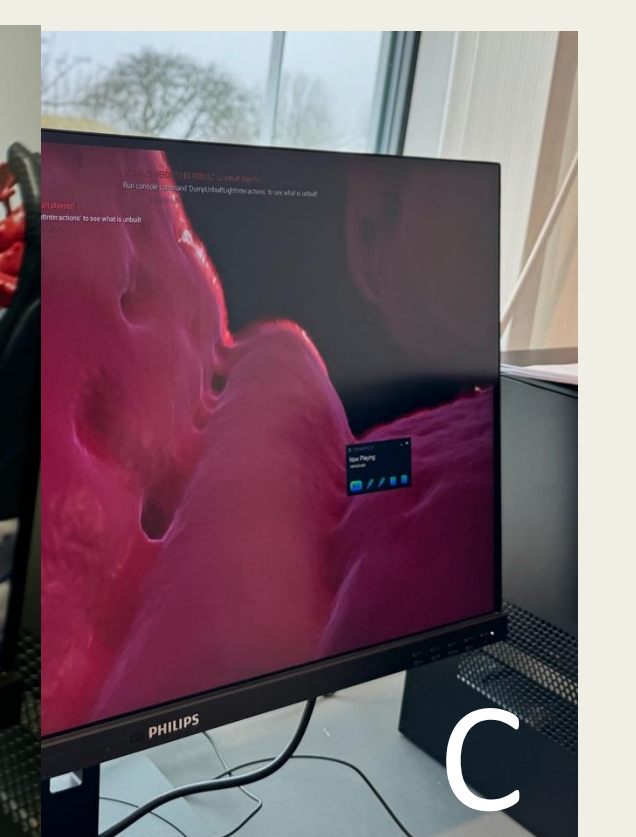
Inspecting A) CT scans of wooden logs and B) MAX IV from the top with stereoscopic glass in the CAVE.

Users: Johannes Huber (LTU), Sheng Leslie Jovenlller (LTU/KTH)



Jens Nirme
IAE in Virtual Reality and interaction

Exploring beamlines and tomographic samples in Virtual Reality



Jonas Ahlstedt
IAE in Virtual Reality and Cell Imaging

Based on original CAD-drawing from the ForMAX beamline

A) User wearing 3D VR glasses, B-C) inspection of a mouse lung scanned with SRμCT (SYRMEP beamline, Elettra, Italy) from the outside (B) and inside (C) and D) VR environment of the ForMAX beamline at MAX IV.

9 partner universities and >60 visualization experts:

Funding from: