10th bwHPC Symposium



Contribution ID: 131

Type: Poster

KI-Morph –User-friendly large-scale image analysis & AI on bwHPC systems

Artificial Intelligence (AI) has become indispensable for analyzing large-scale datasets, particularly in the realm of 3D image volumes.

However, effectively harnessing AI for such tasks often requires advanced algorithms and high-performance computing (HPC) resources, presenting significant challenges for non-technical users.

To overcome these barriers, we present KI-Morph, a novel software platform for large-scale image analysis seamlessly integrated with the bwHPC infrastructure.

It offers a user-friendly interface, enabling sophisticated AI-driven analysis without requiring technical expertise in either AI or HPC.

KI-Morph prioritizes data privacy and sovereignty, ensuring that users retain full control over their data. Additionally, the components developed for the platform support researchers also with science outreach by enabling the creation of interactive online visualizations, for example using the 2D, 3D and augmented reality viewers.

Authors: ZEILMANN, Alexander (Heidelberg University); Prof. HEUVELINE, Vincent (Heidelberg University)